AGRO-INDUSTRIALISATION PROGRAMME

Annual Budget Monitoring Report

Financial Year 2023/24

October 2024

Budget Monitoring and Accountability Unit
Ministry of Finance, Planning and Economic Development
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ABBREVIATIONS

AADS	Agricultural Administrative Data System
AAW	African Armyworm
ACDP	Agriculture Cluster Development Project
ACF	Agriculture Credit Facility
ACF	Agriculture Credit Facility
ACPCU	Ankole Coffee Producers Coffee Union
ACRN	Africa Coffee Research Network
ADB	African Development Bank
AEAS	Agriculture Extension and Advisory System
AEATREC	Agricultural Engineering and Appropriate Technology Research Centre
AEG	Agricultural Extension Grant
AFFCS	Alinga Fruit Farmers' Cooperative Society
AI	Artificial Insemination
AIC	Agriculture Consortium
AIDS	Acquired Immunodeficiency Syndrome
ALST	Agriculture Equipment through Use of Labour-Saving Technologies for Agricultural Mechanization
AnGRC	Animal Genetic Resource Centre
AQUAMIS	Aquaculture Management Information System
ARDC	Aquaculture Research and Development Centre
ARMC	Agricultural Regional Mechanization Centres
AVCDS	Agricultural Value Chain Development Strategy
AVCP	Agriculture Value Chain Development Project
AVPA	Agency for the Valorization of Agricultural Products
BACML	Budadiri Arabica Coffee Factory Limited
BBTD	Banana Bunchy Top Disease
BCTB	Black Coffee Twig Borer
BDS	Business Development Services
BMAU	Budget Monitoring and Accountability Unit
BMPS	Best Aquaculture Practices
Bn	Billion
BoQs	Bills of Quantities
BoU	Bank of Uganda
CAADP	Comprehensive Africa Agriculture Development Program
CABI	Centre for Agriculture and Bioscience International
CAO	Chief Administrative Officer
CARs	Community Access Roads
CBF	Community Based Facilitators
CBPP	Contagious bovine pleuropneumonia
CDO	Community Development Officer
CDO	Cotton Development Organization
CF	Community Facilitator
CGS	Competitive Grant Scheme

CI	Credit Institution
COOP	Cooperatives on Organic Coffee Production
COVABS	College of Veterinary Medicine, Animal Resources and Biosecurity
COVID-19	Corona Virus Disease- 2019
CPDCP	Crop Pests and Diseases Control projects
CQI	coffee quality institute
CRB	Credit Reference Bureau
CRBD	Coffee Red Blister Disease
CSR	Community Social Responsibility
CTC	Cut Tear and Curl
CWDR	Coffee Wilt Disease Resistant
DAES	District Agricultural Extension Services
DAESM	Department of Agricultural Extension and Skills Management
DAIED	Department of Agricultural Investment and Enterprise Development
DAOs	District Agricultural Officer
DAP	Di-ammonium Phosphate.
DARST	District Adaptive Research Support Teams
DCOs	District Business Clinics
DDA	Dairy Development Authority
DFCS	Dairy Farmers Cooperatives
DINU	Development Initiative for Northern Uganda
DIT	Directorate of Industrial Training
DLGs	District Local Government
DLP	Defects Liability Period
DPOs	District Production Officers
DRMS	Domestic revenue mobilization strategy
DVO	District Veterinary Officers
EAC	East African Community
EBQC	Elementary Basic Quality Control
ECA	Eastern and Central African Expertise
EDF	European Development Fund
EDTS	Entebbe Dairy Training School
EIA	Environmental Impact Assessment
ESIA	Environmental Social Impact Assessment
ESMP	Environmental and Social Management Plans
ESMP	Environmental and Social Management Plans
ESW	Electronic Single Window
EU	European Union
EVMG	Electronic Voucher Management Agency
F	Female
FAO	Food and Agricultural Organization
FAQ	Fair Average Quality
FARs	Farm Access Roads
FAW	Fall Armyworm
FBMOs	Farmer Based Management Organisations
FFB	Fresh Fruit Bunches

FFS	Farmer Field Schools
FGDs	Focused Group Discussions
FGs	Farmer Groups
FMD	Foot and Mouth Disease
FO	Fisheries Officer
FONUS	Food and Nutrition Solutions Limited
FOs	Farm Organization
FY	Financial Year
GAPS	Good Agricultural Practices
GDP	Gross Domestic Product
GIS	Geographical Information System
GMP	Good Manufacturing Process
GoU	Government of Uganda
GPS	Global Positioning System
GRP	Goat Roll-Out Project
Ha	Hectare
HH	Households
HIHC	Horyal Investment Holding Company
HIV	Human immunodeficiency virus)
HP	Hydrogen potential
HPLC	High-performance liquid chromatography
HRD	Human Resource Development
HVAC	Heating Ventilation and Air conditioning
IACO	Inter-African Coffee Organisation
ICT	Information and communications technology
ICT	Information Communication Technology
IDA	International Development Association
IEC	Information, Education, and Communication
IFAD	International Fund for Agricultural Development
IFMS	Integrated Financial Management System
IITA	International Institute of Tropical Agriculture
IPM	Integrated Pest Management
IRA	Insurance Regulatory Authority
IsDB	Islamic Development Bank
ISO	International Organization for Standardization (ISO)
ISO	Irrigation Systems Operator
ISTA	International Seed Testing Association
IT	Information Technology
IVF	Invitro-fertilization
IWUA	Irrigation Water User Association
JICA	Japanese International Cooperation Agency
KAZARDI	Kachwekano Agricultural Research Development Institute
KCCA	Kampala Capital City Authority
KECTPA	Kojja-Tojjwe Environment Conservation and Tree Planting Association
KENAS	Kenya Accreditation services
Kgs	Kilogram

Km	Kilometer
KOICA	Korea International Cooperation Agency
KOPGT	Kalangala Oil Palm Growers Trust
LDC-2P	Livestock Disease Control Phase 2
LEGS	Local Economic Growth Support project
LES	Livestock Experimental Station
LG	Local Government
LLG	Lower Local Government
LSD	Lumpy Skin Disease
Ltd	Limited
M	Male
M&E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MBAZARDI	Mbarara Agricultural Research Development Institute
MCAL	Mutuma Commercial Agencies Limited
MCC	Milk Collection Centre
Mcm	Million Cubic Meters
MDALGS	Ministries, Departments, Agencies and Local government
MDAs	Ministries, Departments and Agencies
MEMD	Ministry of Energy and Mineral Development
MESSP	Meat Export Support Services
MFIs	Micro-finance Institutions
MFPED	Ministry of Finance, Planning and Economic Development
MGLSD	Ministry of Gender, Labour, and Social Development
MIS	Management Information System
Mn	Million
MOBIP	Market Oriented and Environmentally Sustainable Beef Industry
MOGLSD	Ministry of Gender Labor and Social Development
MOH	Ministry of Health
MOLG	Ministry of Local Government
MOPS	Ministry of Public Service
MoU	Memorandum of Understanding
MPS	Ministerial Policy Statement
MSCL	Microfinance Support Centre Ltd
MSME	Ministry of Micro, Small and Medium Enterprises
MT	Metric Tone
MTIC	Ministry of Trade Industry and Cooperatives
MTs	Master Trainers
MTTI	Ministry of Trade, Tourism, and Industry
MUZARDI	Mukono Zonal Agricultural Research Development Institute
MWE	Ministry of Water and Environment
NAADS	National Agricultural Advisory Services
NaCORI	National Coffee Research Institute
NaCRRI	National Crops Resources Research Institute
NADDEC	National Animal Disease Diagnostics and Epidemiology Centre
NAEP	National Agricultural Extension Policy

NAES	National Agricultural Extension Strategy
NaFIRRI	National Fisheries Resources Research Institute
NaFORRI	National Forestry Resources Research Institute
NAGRC&DB	National Animal Genetic Resources Center and Data Bank
NaLiRRI	National Livestock Resources Research Institute
NARL	National Agricultural Research Laboratories
NARO	National Agriculture Research Organization
NAROSEC	National Agriculture Research Organization Secretariat
NASARRI	National Semi-Arid Resources Research Institute
NBC	National Biosafety Committee
NCD	Newcastle Disease Vaccine
NCS	National Council of Science
NDA	National Drug Authority
NDAL	National Dairy Analytical Laboratory
NDL	National Dairy Laboratory
NDP	National Development Plan
NDPIII	National Development Plan iii
NEC	National Enterprise Corporation
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NFASS	National Food and Agricultural Statistics System
NHL	NARO Holdings Limited
NIRA	National Identification and Registration Authority
NITA-U	National Information Technology Authority- Uganda
NLI	National Leadership Institute
NLR	National Laboratories Research
NML	National Metrological Laboratory
NMS	National Medical Store
NOPP	National Oil Palm Project
NOSP	National Oil Seeds Project
NPA	National Planning Authority
NPDC	National Poultry Development Centre
NPT	National Performance Trial fields
NWSC	National Water and Sewerage Corporation
OAG	Office of the Auditor General
OPBL	Oil Palm Buvuma Limited
OPGs	Oil Palm Growers
OPM	Office of the Prime Minister
OWC	Operation Wealth Creation
PAH	Polycyclic Aromatic Hydrocarbons
PAPs	Project Affected Persons
PBS	Programme Based Budgeting System
PCDAs	Parish Coffee Development Advisors
PDC	Parish Development Committee
PDM	Parish Development Model
PDMIS	Parish Development Management Information System

PET	poly ethylene terephthalate
PFI	Participating Financial Institution
PFM	Public Financial Management
PIAP	Programme Implementation Action Plans
PMG	Production and Marketing Grant
PMU	Programme Implementation Unit
POs	Producer Organizations
PPC	Portland Pozzolanic Cement
PPDA	Public Procurement and Disposal of Assets
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
PPR	Peste des petits ruminants
PRELNOR	Project for Restoration of Livelihoods in the Northern Region
PSP	Public Stand Posts
PVCs	Polyvinyl Chloride
PWD	Persons with Disabilities
Q	Quarter
Q-mark	Quality Mark
RAP	Resettlement Action Plan
RCEO	Regional Coffee Extension Officers
RFSC	Regional Farm Service Centre
RSPO `	Roundtable on Sustainable Palm Oil
RTD	Ready to Drink
SACCO	Savings and Credit Cooperative Organization
SAGIP	Strategic Intervention for Animal Genetic Improvement Project
SAL	Soybean Africa Limited
SLM	Sustainable Land Management
SMEs	Small and Medium Enterprises
SOFTE	Soroti Fruit Factory
SOP	Standard Operating Procedure
SRS	System Requirements Specification
SSI	Small Scale Irrigation
SSTS	Seed Traceability and Tracking system
TC	Town Council
ToTs	Training of trainers
TRICOT	Triadic Comparison of Technologies
UAIS	Uganda agricultural insurance scheme
UBA	United Bank of Africa
UBOS	Uganda Bureau of Statistics
UCA	Uganda Cooperative Alliance
UCDA	Uganda Coffee Development Authority
UCF	Uganda Coffee Federation
UDB	Uganda Development Bank
UDBL	Uganda Development Bank Limited
UDC	Uganda Development Corporation
UEPB	Uganda Export Promotions Board

UETCL	Uganda Electricity Transmission Company Limited
Ug shs	Uganda Shillings
UGCEA	Uganda Ginners and Cotton Exports Association
UGIFT	Uganda Intergovernmental Fiscal Transfer Program
UGX	Uganda Shillings
UHPLC	Ultra-High-Performance Liquid Chromatography
UHT	Ultra-High Temperature
ULITS	Uganda Livestock Identification and Traceability System
UMFSNP	Uganda Multi-sectoral Food Security and Nutrition Project
UNBS	Uganda National Bureau of Standards
UNRA	Uganda National Road Authority
UPDF	Uganda Peoples Defense Forces
URA	Uganda Revenue Authority
URSB	Uganda Registration Services Bureau
USA	United States of America
USADAF	United States African Development Foundation
USAID	United States Agency for International Development
USD	US dollars
UWRS	Uganda Warehouse Receipt System Uganda Export Promotions Board
VAT	Value Added Tax
VFM	Value for Money
VIP	Ventilated Improved Pit
VRC	Variety Release Committee
VSLAS	Village Savings and Loans Association
VT	Valley Tanks
WFP	Water for Production
Wp	Watt peak
WRS	Warehouse Receipt System Services
WUA	Water Users' Association
WUCs	Water User Committees (WUCs)
Y	Youth
ZARDI	Zonal Agricultural Research Development Institute

FOREWORD

At the start of the Financial Year 2023/24, the Government of Uganda outlined strategies to restore the economy back to the medium -term growth path and improve competitiveness. The strategic interventions that were prioritized under various programmes included: roads under Integrated Transport; electricity under the Sustainable Energy Development; irrigation under Agro-Industrialization; Industrial parks under Manufacturing; support to medical schools and science-based research and development under Human Capital Development; as well as oil and gas among others.

Annual programme assessments have been made, and it has been established that performance was fairly good. This implies that programmes are on track, but with a lot of improvements required. To that effect, I urge you to critically review the findings of the performance reports with a view to improving effectiveness in implementation of activities going forward. These monitoring findings form a very important building block upon which programmes can commence the reflective exercises.

The government has embarked on the 10-fold growth strategy that demands for enhanced efficiency and effectiveness within programmes. We cannot afford to have fair performance scores hence forth, as this will jeopardize the prospects of doubling the economic growth rates in the medium term.

Ramathan Ggoobi
Permanent Secretary/ Secretary to the Treasury

EXECUTIVE SUMMARY

Introduction

The Goal of the Agro-Industrialisation Programme is to increase commercialization and competitiveness of agricultural production and agro-processing. The budget expenditures in FY 2023/24 prioritized implementation of the Parish Development Model (PDM); water for production and irrigation systems; provision of affordable credit; enhancing storage, agro-processing, and marketing; agricultural research and animal breeding; disease control; climate resilience and commercializing agriculture.

Financial performance

The appropriated budget for the Agro-Industrialisation Programme for the FY 2023/24 including local government grant releases, was Ug shs 2,072.797 billion (bn) of which Ug shs 1,025.302 bn was external financing representing 49.5%. By 30th June, 2024, Ug shs 1,402.109 bn was released (67.6% of the appropriated budget) and Ug shs 1,151.781 bn spent (82.1% of the release). The budget release and expenditure performance for the programme was fair and good, respectively. The external budget release and expenditure performance was poor and fair at 40.3% and 54.3%, respectively. The poor release performance for external financing was attributed to delayed fulfillment of disbursement conditions.

Overall programme performance

There was good progress in realization of the goal of the Agro-industrialisation Programme in terms of increasing commercialization and competitiveness of agricultural production and agro-processing. The overall programme performance was good (73.6%) during FY 2023/24, although some interventions underperformed. The programme average output performance was fair (69.4%) whereas the average outcome performance was good (85.3%).

Agricultural commercialisation and competitiveness were enhanced, especially for the priority commodities. The share of agricultural exports to total exports was 35% valued at US$ 2.5 billion for priority agricultural commodities. For example, the quantity, and value of coffee exported during the FY2023/24 increased by 6.3% and 34.7%, respectively in comparison to FY2022/23. Other intermediate outcomes had very good performance and most of the set targets were achieved. This was evidenced with growth of the agriculture sector to 5.1% from 4.5% in FY2022/23. The increased production in agriculture, industry and associated services[1] contributed to the national growth of the economy. The Ugandan Economy attained a 6% growth in FY 2023/24 compared to 5.3% in FY 2022/23.

Good performance was attributed to strategic public and private investments such as: a) Agricultural Credit Facility (ACF) subsidies b) Parish Development Model (PDM) for strategic enterprises c) innovative approaches and engineering solutions in research and technology generation to support agro-industrialisation d) favourable climatic conditions e) multi-year

[1] MFPED, 2024. Background to the Budget

investments in agricultural infrastructure and equipment and f) increased off budget support by private sector, bilateral funding organisations, local businesses and community counterpart funding.

Under performance in some areas was partly due to budget cuts; end of donor and off budget support leaving some of the outputs partially implemented; late releases and disbursements of both GoU and donor financing to implementing agencies; restriction of movement and sale of livestock due to the high prevalence of Foot and Mouth Disease (FMD) in the cattle corridor; and sub-optimal performance or non-functionality of established agro-processing facilities. The summary performance by sub-program is presented below.

Agricultural Production and Productivity sub-programme.
The sub-programme performance was good at 85%. Most of the planned outcome targets were achieved and performance was at 95.1% whereas the output performance was good at 79.5%.

Research and technology development: The National Agricultural Research Organisation (NARO) released 12 new nutrient dense crop varieties for maize, beans, rice, groundnuts, sweet potatoes, and irish potatoes. The NARO also developed four fish feed formulations for Nile Perch, Tilapia, and African catfish and were ready for upscaling. Development of new crop varieties with desired attributes was ongoing for potatoes, arabica coffee and sunflower. The NARO signed 10 licensing agreements with ten seed companies to commercialize the improved varieties and collected royalties from five seed companies. A total of 175 metric tons of seed were generated through NARO Holdings Limited (NHL) and distributed to farmers.

Research and development to generate innovative agricultural value-added products and engineering solutions for supporting industrialisation and import substitution was ongoing at various NARO institutes. A key risk was that most value-added technologies were partially developed as they depended on short term external funding that ended, and no Government of Uganda budget was allocated to complete the research.

The establishment of the Anti-Tick Vaccine Facility in Nakyesesa village in Wakiso district was was at 50% progress for both civil works and installation of machinery. Vaccine field based clinical trials were completed, and pilot testing of the installed equipment was ongoing. The facility was yet to acquire a Biosafety Certificate and Licence for commercial vaccine production.

Despite the increased generation of agricultural technologies, most PDM farmers lacked access to good quality seed, breeds and agro inputs. This was indicative of weak research-extension-farmer linkages. In addition, fake seeds with low viability (30% on average) were prevalent on the market due to poor inspection and enforcement of quality assurance regulations by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Local Governments.

Animal breeding: The performance of the animal breeding programme under the National Animal Genetic Resources Centre and Data Bank (NAGRC&DB) was fair. This was occasioned by the stalled infrastructure projects, inadequate funds, human resource, equipment, and mortality of animals and birds due to diseases. The Bull stud in Entebbe Municipality Wakiso

district was 50% functional and a total of 56,528 doses of semen were produced against an annual target of 142,906 doses. The expansion and renovation of the Semen Laboratory was behind schedule at 58.1% physical progress against a 100%-time progress. This was due to scope variations and too much rain in 2024A season. However, a no cost contract extension was approved up to November 2024 to complete the civil works and install the procured equipment.

Provision of agricultural inputs to various farmers and farmer groups was done by the Uganda Coffee Development Authority (UCDA), National Agricultural Advisory Services (NAADS), Cotton Development Organisation (CDO), Dairy Development Authority (DDA) and District Local Governments (DLGs). The inputs distributed ranged from seedlings, seeds, pesticides, fertilizers, livestock, poultry, fish fingerlings, feeds, farm tools and safety gear. There was gender disparity in the distribution of these inputs with male individuals being the dominant beneficiaries (male farmers 59%; female farmers 11%; Cooperatives 28%; private companies 11%. A significant number of farmers that benefitted from cotton seed had crop failure due to intermittent rains in the districts Packwach, Lira and Oyam.

Agricultural extension: a total of 28,453 farmers received training from various actors in the agricultural extension system for example UCDA, DDA, MAAIF, CDO, among others. The training and advisory covered areas like business development services, pasture management, animal health, postharvest handling, and management; pest and diseases control, value addition and group dynamics. The MAAIF piloted the agricultural extension and advisory system E-diary in 35 districts and 17,241 staff were trained. The performance of the agricultural extension system strengthening was poor due to a number of factors including inadequate extension workers, and lack of transport equipment among others. By 30th June 2024, the staffing of extension workers in the country was low with 3,790 positions filled representing 43.6% of the approved staffing norm.

Management of pests, vectors, and diseases: The MAAIF procured and distributed a combined total of 13 million vaccine doses for foot and mouth disease, anthrax, lumpy skin disease and rabies to all district local governments. The MAAIF also distributed 200 scientific fridges to support the vaccine cold chain at the district local governments. The majority of fridges received, however, were not in use due to high energy consumption. In addition, the laboratories in LGs were too small to accommodate the fridges and some were found in corridors of the Agriculture Departments.

Water for agricultural production: Good progress was made in the provision of water for production by the MAAIF and the Ministry of Water and Environment (MWE). The cumulative water storage of established infrastructure was at 54.76 million m^3 and covered a land area of 23,141 ha. Various large-scale irrigation schemes were under construction and at various levels of progress. For example, the Acomai Irrigation Scheme was at 75% physical progress; Wadelai stalled at 93% physical progress whereas Kabuyanda was at 20% progress. Construction of other planned large-scale irrigation schemes like Amagoro and Matanda were still at design stage.

The MWE completed construction of 36 small scale solar powered irrigation schemes; 113 schemes were under construction while 103 were at design stage. The MAAIF constructed and rehabilitated 109 valley tanks and fishponds with a total water storage capacity of 3,230,000m^3.

The MWE completed the construction of nine valley tanks in eight districts with a storage capacity of 90,000 m^3 water storage capacity. A total of 13 valley tanks were under construction at varying levels of progress.

A gravitational flow mini-irrigation scheme for rice research at the NARO Kamenyamiggo Satellite Station in Masaka district was behind schedule at 85% physical progress. The project was at risk as the financing under AVCP was phasing out by June 2025. Construction of another mini-irrigation schemes under AVCP funding was substantially complete at NARO Ikulwe satellite station. The MAAIF, with funding from the Uganda intergovernmental fiscal transfer program project (UgIFT) established various microscale irrigation schemes at individual farms and demonstration sites. The performance of the UgIFT project was poor in the monitored districts with 16% achievement of the planned farmer installations target and 34% utilization of the availed funds. The poor performance was attributed to the high farmer co-funding of 25%.

Functionality of the established irrigation schemes was at 88%. This was largely attributed to delayed commissioning of completed schemes, incomplete installation such as at Kana Model Farm in Kyenjojo district, and abandonment of sites by contractors such as Wadelai in Packwach district.

Storage, Agro-Processing and Value Addition Sub-Programme

The overall sub-programme performance was good 71%. The output performance was fair at 57.4% whereas the intermediate outcome performance was very good at 96.1%. Good outcome performance was observed under indicators for improved postharvest handling and management and increased agro-processing and value addition.

The very good performance was contributed to by the significant investment by the private sector in the establishment of numerous agro-processing and storage facilities. Significant progress was attained in the establishment of storage, processing and value-addition facilities; however, most were nonfunctional or operating at below installed capacity. The ACDP established 358 storage and agro-processing facilities with a storage capacity of 82,514 metric tonnes. A key challenge is that the ACDP ended when 20% of the value addition facilities were not functional due to lack of power connections and working capital.

Similarly, the functionality of established facilities under the UDC was not realized. For example, Atiak Sugar Factory that was not processing cane to sugar; Yumbe Fruit Factory had not started mango processing and Mpanga Growers' Tea Factory was non-operational at the time of monitoring.

The UCDA distributed 25 wet mills and 50 hand pulpers that were procured during FY2022/23. The NAADS delivered and installed 19 maize milling equipment for the 19 farmer organizations. In addition, the NAADS procured a mini dairy and oil processing unit which was yet to be delivered.

Agricultural Market Access and Competitiveness

The sub-programme performance was good at 87.4%. The sub-programme achieved most of the planned output targets and achieved all the intermediate outcome targets. The percentage share of agricultural exports to total exports was at 35% against the targeted 33%. The construction of various infrastructures that facilitate market access and competitiveness of agricultural products were at varying level of progress.

Construction of the National metrology laboratory at the Uganda National Bureau of Standards (UNBS) under the Agriculture Value Chain Programme project had been completed and equipment installation was at 50%. Renovation of the sanitary and phytosanitary laboratory at Namalere was ongoing at 40% physical progress whereas the construction of milk collection centre (MCC) at Nabiswera, Nakasongola district was at 50%. Contract periods for the renovation of the Sanitary and Phytosanitary laboratory and Nabiswera MCC expired by 31st July 2024 and an extension up to 30th November was granted. Construction of the Sanga Slaughter Facility in Sanga Town Council, Kiruhura District was completed, except for the external compound works that were ongoing at 50% progress.

A total of 1,118.6km of community access roads were completed under the ACDP. However, road works under phase 3 in the 29 rollout districts were incomplete by July 2024 at 85% physical progress. There were cases of abandonment of phase 3 sites by contractors in some districts due to revisions of scope during contract execution. There were, however, sustainability concerns for constructed and rehabilitated roads as these were not integrated in the district plans and budgets for maintenance.

The UCDA inspected and certified 6,126,397 bags (60kgs) of coffee for export worth US$1.14bn. The UCDA inspected 3,413 coffee factories, stores, roasters and grinding units. The Dairy Development Authority (DDA) inspected 3,754 milk handling premises, equipment, and consignments. The accreditation process for the National Dairy Laboratory was ongoing though behind schedule and a total of 5,509 milk and dairy products were analyzed. The UNBS certified 4951 products and 34 management systems.

Agricultural Financing

By 30th June 2024, the performance of the sub programme was fair at 65.6% achievement of set targets. The Agricultural Credit Facility (ACF) provided loans to 987 beneficiaries amounting to Ug shs 162.7 bn of which the GoU contribution was Ug shs 81.458 bn. Loans purposed for improvement of agricultural production and productivity had the highest share at 45%; followed by value addition (42%) and grain trade (13%).

The central region had the highest share of the total loan facilities at 62.6% whereas the northern region had the least share at 4%. The low uptake of the facility in Northern region was majorly attributed to inadequate financial literacy, inadequate collateral, and information gaps on ACF in Participating Financial Institutions (PFI) branches. About 82.7% of the loan facilities to individual borrowers were given to males whereas the females constituted 17.3% of the beneficiaries.

Some ACF projects monitored received less funds than requested, mostly due to inadequate collateral; this constraint affected the viability of the projects. The time taken to process and

access ACF loans by farmers reduced from 4 months in FY 2022/23 to one month on average in FY 2023/24. This was attributed to the introduction of the Agricultural Credit System at Bank of Uganda that quickened online appraisal of loan applications and disbursements.

The Agriculture Insurance Consortium Ltd (AIC) extended a subsidy of Ug shs 3.245 bn to 35,262 farmers to insure against crop and livestock failure under the Agricultural Insurance Scheme. Farmers paid a premium of 5% of the insurance cover. The scheme was extended to PDM farmers who were requested to pay 5% of the Ug shs 1 million received. Since most farmers did not have cash to pay the premium, there were instances where the 5% was deducted by district leaders from the Ug shs 1 million disbursed under PDM which was considered corruption. In all the monitored regions, the subsidy was inadequate as it covered only 20% of the farmers that applied for insurance cover. The Western region had the highest number of farmers embracing agriculture insurance at 36% and the value insured at Ug shs 85.5 bn whereas the Eastern region had the lowest number at 11.7% and value insured at Ug shs 17.9 bn.

The Uganda Development Corporation (UDC) continued supporting the 10 Agro-Industrialisation investments[2] with an availed resource of Ug shs 135.885 bn. By 30th June, 2024 Ug shs 97.644 bn was spent by three UDC investee companies[3]. The HIHC Atiak sugar factory had the expenditure share at 91.7% with the rest shared between Soroti Fruit Factory (SOFTE) and Yumbe fruit factory/Nilezilla limited.

The Soroti Fruit Factory (SOFTE) processed 1000MT and 455.7MT of oranges and mango fruits, respectively. The performance of the SOFTE was poor, attributed to inadequate financing of the entity to procure an industrial packaging line for ready to drink juice and low uptake of the concentrate. Whereas Yumbe fruit factory/ Nilezilla limited received funding in quarter two of the FY2023/24 it was not yet ready for operations. The Mutuma Commercial Agencies Limited (MCAL) acquired some processing equipment to improve its operation efficiency and recorded a positive growth in terms of raw material purchases and sales. Budadiri purchased coffee (parchment and green beans) worth Ug shs 3.5 bn. A total of three out of the four monitored UDC investments operated at loss. These were; SOFTE, MCAL and Budadiri Arabica Coffee Factory Limited while Yumbe fruit factory did not commence operations.

Institutional Strengthening and Coordination

The sub-programme performance was fair at 59% achievement of the set targets. Key achievements under the sub-programme were reviews of laws and regulations within the Agro-Industrialisation programme. For example, the Plant Protection and Health Act 2015, Seeds and Plants Act 2006, Plant Variety Protection Act 2014. The Draft National Coffee Regulations were developed; and the Veterinary Practitioners and Animal Feeds Bills were gazetted.

[2] Soroti fruits limited; Cocoa processing factory; Luwero fruit factory; HIHCAtiak sugar factory; Potato processing factory; Kaaro koffi limited; Yumbe fruit factory; Acholi bur cassava processing plant; Busoga sugar cane transporters grant; and Busoga sugar factory

[3] Soroti Fruits Factory, Yumbe Fruit Factory/ Nilezilla limited. and Atiak Sugar Factory. The planned investment for FY2023/24 in the rest of the seven companies was not undertaken. They however implemented rolled over activities from previous financial years.

Five regional offices were established by the Agro-Consortium[4] in Mbale, Fort portal, Mbarara, Gulu and Lira that improved farmers' access to the Agricultural Insurance Scheme. Outreach to dairy farmers improved with the establishment/strengthening of six regional offices in Kampala (Central), Jinja (Eastern), Soroti (Northeastern), Gulu (Northern), Kiboga (Mid-Western) and Mbarara (Southwestern). Access by farmers to the National Oil Seeds Project (NOSP) improved with the establishment of six hubs in West Nile (Arua), Northern (Gulu), Mid-Western (Hoima), Mid Northern (Lira), Eastern (Mbale and Karamoja.

Support to Oil Seeds Value Chain Development was done through profiling, selecting and forming 200 farmer groups and 106 multi-stakeholder platforms. The Cotton Training Manual for extension workers and the Farmers' Cotton Production Guide were reviewed and updated. A total of 158 motorcycles were procured and distributed to 79 DLGs implementing the National oil seeds project. The development of an Integrated Management Information System (MIS) for Livestock Service was on-going. The UCDA piloted registration of coffee farmers in western, greater Masaka and central coffee growing regions and a total of 3,270 farmers were registered.

Implementation of the PDM strengthened the lower local government institutions especially at the parish and village level.

Extension workers were actively engaged in forming and training PDM enterprise groups and individual beneficiaries. The training covered improving agricultural practices and conducting comprehensive enterprise profitability analysis (Ekibaro). The Wendi Mobile Wallet was introduced and subsequently rolled out across the districts. This reduced the costs and risks associated with accessing traditional banking services. This digital financial platform enabled beneficiaries to access their funds more efficiently and securely through their mobile devices.

Challenges

1) Non-functionality of agro-processing facilities under ACDP and UDC; and incomplete or poorly maintained road chokes and bridges left after the closure of the ACDP.
2) Limited outreach to farmers (20%) of the Agricultural Insurance Scheme due to the inadequate subsidy of Ug shs 5bn annually and low understanding of the scheme among potential beneficiaries and local government leaders.
3) Late handover of project sites to the contractor (Nexus Green) under the Development of Solar Powered Water Supply and Irrigation Systems Project. This was majorly due to land wrangles and in some cases the water resource potential was not adequate to allow construction works.
4) Increased incidence of pests and diseases affecting crop and animal enterprises partly due to the weak research-extension-farmer linkages for delivering technology and extension advice to farmers. For example, the black coffee twig borer that is affecting robusta coffee farmers and the outbreak of foot and mouth disease in the cattle corridor.

[4] The Agro Consortium is a coalition of 13 insurance companies offering agricultural insurance covering both crop and livestock risks.

5) Limited access to the Parish-Based Management Information System (PDMIS) and lack of a monitoring budget by the district production office posed a significant barrier to the effective monitoring and management of PDM

Recommendations

1) The UDC should expedite pre-investment studies and processes whereas the MAAIF, MEMD, MOWT and DLGs should collaborate to ensure that all established agro-processing facilities are connected to power and the donor financed roads are integrated and maintained in the relevant DLG budgets.
2) The MFPED to consider raising the subsidy under the Agricultural Insurance Scheme to at least Ug shs 10bn.
3) The MWE should work closely with the district local governments for timely identification of feasible sites.
4) The NARO, MAAIF and DLGs should collaborate and prioritize resources to strengthen the research-extension-farmer linkages and dissemination of appropriate technologies to farmers, especially the PDM beneficiaries to manage emerging pests and control of animal epidemics.
5) The MFPED and MOLG should grant viewing rights to the District Production Officers on the PDMIS and facilitate their supervision and monitoring of the PDM interventions, in collaboration with other district and parish leaders.

CHAPTER 1: INTRODUCTION

1.1 Background

The mission of the Ministry of Finance, Planning and Economic Development (MFPED) is, "*To formulate sound economic policies, maximize revenue mobilisation, and ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development.*"

The MFPED through its Budget Monitoring and Accountability Unit (BMAU) tracks implementation of programmes/projects by observing how values of different financial and physical indicators change over time against stated goals, indicators, and targets (how things are working). The BMAU work is aligned to budget execution, accountability, service delivery, and implementation of the Domestic Revenue Mobilization Strategy (DRMS).

Starting FY 2021/22, the BMAU has been undertaking Programme-Based Monitoring to assess performance against targets and outcomes in the Programme Implementation Action Plans (PIAPs) and the third National Development Plan (NDPIII). Annual field monitoring of government programmes and projects was undertaken to verify receipt and application of funds by the user entities and beneficiaries, the outputs and intermediate outcomes achieved, and level of gender and equity compliance in the budget execution processes.

The monitoring covered the following Programmes: Agro-Industrialisation; Community Mobilization and Mindset Change; Digital Transformation; Human Capital Development; Innovation, Technology Development and Transfer; Integrated Transport Infrastructure and Services; Manufacturing; Mineral Development; Natural Resources, Environment, Climate Change, Land and Water Management; Public Sector Transformation; Sustainable Development of Petroleum Resources; and Sustainable Energy Development.

This Annual Monitoring Report presents findings from monitoring the Agro-Industrialisation Programme for the budget execution period 1st July 2023 to 30th June 2024.

1.2 Programme Goal and Objectives

The Goal of the Agro-Industrialisation Programme is *"To increase commercialization and competitiveness of agricultural production and agro-processing."*

The programme objectives are to:

1) Increase agricultural production and productivity.
2) Improve post-harvest handling and storage.
3) Improve agro-processing and value addition.
4) Increase market access and competitiveness of agricultural products in domestic and international markets.
5) Increase the mobilization and equitable access and utilization of agricultural finance; and
6) Strengthen the institutional coordination for improved service delivery.

The budget strategy for FY 2023/24 was guided by the theme *"Full Monetization of Uganda's Economy through Commercial Agriculture, Industrialisation, Expanding and Broadening Services, Digital Transformation and Market Access".* Key expenditure drivers focused on implementation of

the Parish Development Model (PDM) to enhance production, productivity, and household incomes; development of small medium and large-scale irrigation systems; provision of affordable credit; enhancing storage and marketing; climate resilience programmes; agricultural research; disease control and commercializing agriculture (Budget Speech FY 2023/24).

1.3 Sub-Programmes

The Agro-Industrialisation Programme is implemented through five sub-programmes, namely:

i) Agricultural Production and Productivity
ii) Storage, Agro-processing, and Value Addition
iii) Agricultural Market Access and Competitiveness
iv) Agricultural Financing
v) Institutional Strengthening and Coordination

1.4 Programme Outcomes

The FY 2023/24 marked the fourth out of the five years of implementing the NDPIII. The key results to be achieved over the five-year period (FY 2020/21 to FY 2024/25) are[5]:

i) Increased total export value of processed agricultural commodities; coffee, tea, fish, dairy, meat, and maize (and its products) from; US$ 0.935 bn to US$ 2.7 bn.
ii) Reduced total value of imported cereals and cereal preparations, vegetable fats and oils, and sugar preparations from US$ 931.1 million to US$ 500 million.
iii) Increased agricultural sector growth rate from 3.8 percent to 6.0 percent.
iv) Increased labour productivity in the agro-industrial value chain (value added, US$ per worker) from US$ 2,212 to US$ 3,114.
v) Increased number of jobs created per annum in agro-industry along the value chain by 180,000;
vi) Reduced percentage of households' dependent on subsistence agriculture as a main source of livelihood from 68.9 percent to 55 percent; and
vii) Increased proportion of households that are food secure from 60 percent to 90 percent.

[5] Third National Development Plan (NDPIII)

CHAPTER 2: METHODOLOGY

2.1 Scope

The monitoring report is based on selected but representative interventions in the Agro-Industrialisation Programme that were planned during FY 2023/24. A total of 18 (53%) of the planned interventions in the Programme Implementation Action Plan (PIAP) were monitored **(Table 2.1).** Some interventions were not assessed due to two key reasons: a) they were not planned and budgeted for implementation in 2023/24 and b) lacked credible data.

Table 2.1: Number of interventions monitored during FY 2023/24

SN	Sub-programme	Total interventions in PIAP	No of PIAP interventions monitored
1	Agricultural Production and Productivity	13	8
2	Storage, Agro-processing, and Value Addition	8	4
3	Agricultural Market Access and Competitiveness	5	3
4	Agricultural Financing	6	2
5	Institutional Strengthening and Collaboration	2	1
	Total Interventions	**34**	**18**
	% of Total Interventions monitored		**53**

The selection of projects and interventions to monitor was based on the following criteria:

1) Significant contribution to the programme objectives and national priorities.
2) Level of investment, interventions that had major allocations were prioritized.
3) Multi-year investments under implementation in the current year.
4) Projects that were considered at risk, mostly due to low absorption of external financing

2.2 Approach and Sampling Methods

Monitoring involved analysis and tracking of performance indicators in the policy, work plans and performance reports of the Agro-industralization Programme. Both qualitative and quantitative methods were used in the monitoring exercise. Physical monitoring of outputs and intermediate outcomes was undertaken using purposive sampling.

To aid mapping of PIAP interventions against annual planned targets stated in the Vote MPS and quarterly work plans, a multi-stage sampling was undertaken at four levels: i) Sub-programmes ii) Sub sub-programmes iii) Local governments, and iv) Project beneficiaries. The selection of districts, facilities, and beneficiaries to monitor considered regional and gender representation.

2.3 Data Collection and Analysis

Data collection
The monitored entities and beneficiaries **(Annex 1)** were consulted to provide data. The monitoring team employed both primary and secondary data collection methods. **Secondary data collection methods** included.

i) Literature review from key policy documents including, Ministerial Policy Statement (MPS) FY 2023/24; National and Programme Budget Framework Papers; Programme Implementation Action Plans (PIAPs), (NDP III), quarterly progress reports and work plans for the respective implementing agencies, Quarterly Performance Reports, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, project reports, strategic plans, policy documents, Aide Memoires and Evaluation Reports for selected programmes/projects.

ii) Review and analysis of data from the Integrated Financial Management System (IFMS); Programme Budgeting System (PBS); Quarterly Performance Reports and Bank statements from some implementing agencies.

Primary data collection methods included.

i) Consultations and key informant interviews with Institutional heads, project/intervention managers, Household Heads, and service beneficiaries at various implementation levels. Focused Group Discussions (FGDs) were also held in instances of group beneficiaries.
ii) Field visits to various districts, for primary data collection, observation, and photography.
iii) Call-backs in some cases were made to triangulate information.

2.4 Data Analysis

The data was analyzed using both qualitative and quantitative approaches. Qualitative data was examined and classified in terms of constructs, themes, or patterns to explain events among the beneficiaries (interpretation analysis) and reflective analysis where the monitoring teams provided an objective interpretation of the field events. Quantitative data on the other hand was analyzed using advanced excel tools that aided interpretation.

Comparative analyses were done using percentages, averages, and cross tabulations of the outputs/interventions, intermediate outcome indicators and the overall scores. Performance of outputs/interventions and intermediate outcome indicators was rated in percentages according to level of achievement against the annual targets. The sub-programme score was determined as the weighted aggregate of the average percentage ratings for the output/intermediate outcomes in the ratio of 65%:35% respectively.

The overall programme performance is an average of individual sub-programme scores assessed. The performance of the programme and sub-programme was rated on the basis of the criterion in **Table 2.2.** Based on the rating assigned, a BMAU colour coded system was used to alert the policy makers and implementers on whether the interventions were achieved or had very good performance (Green), or good performance (yellow), fair performance (light gold) and poor performance (Red) to aid decision making.

Table 2.2: Assessment guide to measure performance in FY 2023/24

Score	Performance Rating	Comment
90% and above	Green	Very Good (Achieved at least 90% of outputs and outcomes)
70%-89%	Yellow	Good (Achieved at least 70% of outputs and outcomes)
50%- 69%	Light Gold	Fair (Achieved at least 50% of outputs and outcomes)
49% and below	Red	Poor (Achieved below 50% of outputs and outcomes)

Source: Author's Compilation

Ethical considerations

Entry meetings were undertaken with the Permanent Secretaries/and Accounting Officers or delegated Officers upon commencement of the monitoring exercises. Consent was sought from all respondents including programme or project beneficiaries. All information obtained during the budget monitoring exercise was treated with a high degree of confidentiality and only used in policy making and improving service delivery.

2.4 Limitations

i) Inability to monitor some of the selected farms due to restrictions on movements in the cattle corridor that was affected by the Foot and Mouth Disease.

ii) Difficulty of accessing data from some institutions such as the NAGRC&DB

2.5 Structure of the Report

The report is structured into four chapters. These are: Introduction; Methodology; Programme Performance and; Conclusion and Recommendations.

CHAPTER 3: PROGRAMME PERFORMANCE

3.1 Overall Programme Performance

3.1.1 Financial performance

The appropriated budget for the Agro-Industrialisation Programme for the FY 2023/24 including local government grant releases, was Ug shs 2,072.797 billion (bn) of which Ug shs 1,025.302 bn was external financing representing 49.5%. By 30th June, 2024, Ug shs 1,402.109 bn was released (67.6% of the appropriated budget) and Ug shs 1,151.781 bn spent (82.1% of the release). The budget release and expenditure performance for the programme was fair and good, respectively.

The external financing of the programme supports interventions in three votes: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Ministry of Local Government (MoLG) and Ministry of Water and Environment (MWE). The external financing budget for the programme was Ug shs 1,025.302 bn of which Ug shs 413.325 bn was released and Ug shs 224.561 bn spent **(Table 3.1).** The external budget release and expenditure performance was poor and fair at 40.3% and 54.3%, respectively. The poor release performance for external financing was attributed to delayed fulfillment of disbursement conditions.

The release and expenditure performance for the external financing for MAAIF was poor and fair, respectively. The MoLG received 100% of the annual external financing budget; however, the expenditure was poor at 8.1%. Key challenges were: delayed verification and compensation of project-affected persons (PAPs) for infrastructure-related projects, delayed completion of environment, and social impact assessments, detailed scheme designs, and procurement of contractors and consultants.

Table 3.1: External Financing performance for the Agro-Industrialisation Programme as at 30th June, 2024

Ministry	Budget (Ug shs bn)	Release (Ug shs bn)	Spent (Ug shs bn)	% of the budget released	% of the release spent
MAAIF	828.018	214.578	138.838	25.9	64.7
MWE	182.259	183.724	84.507	100.8	46
MoLG	15.025	15.023	1.217	100	8.1
Total	**1,025.302**	**413.325**	**224.561**	**40.3**	**54.3**

Source: Programme Based System

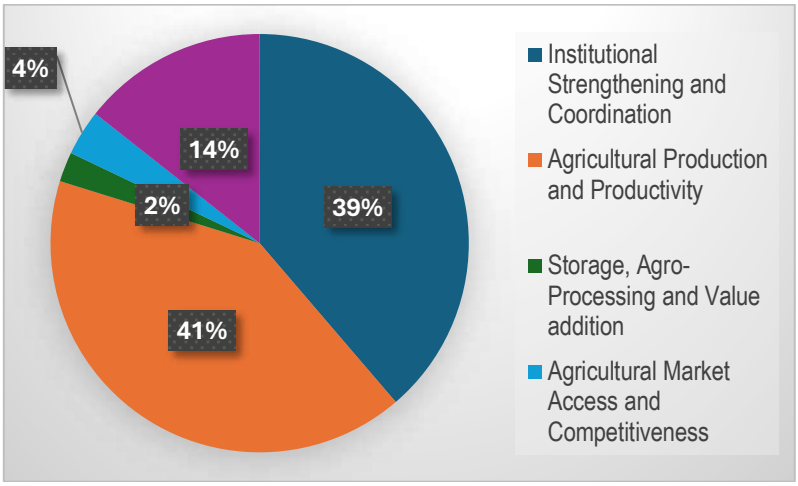
Financial performance by sub-programme assessed the release and expenditure of the appropriated domestic budget by the five sub-programmes. The appropriation for agricultural financing sub-programme was done under two programmes; manufacturing and private sector development. The budget analyzed was for 14 central government and 176 local government votes[6];

[6] MAAIF 010; MoLG 011; MTIC 015; MWE 019; MEACA 021; NPA 108; DDA 121; KCCA 122; NAGRC&DB 125; NARO 142; NAADS 152; UNBS 154; CDO 155; UCDA 160; Cities 601-610; Municipalities 701-731; and DLG 801-935.

and three subventions (Bank of Uganda BoU, Uganda Development Corporation UDC and Agriculture Insurance Consortium AIC) that contribute to the programme interventions.

In relation to the distribution of the Budget, the agricultural production and productivity sub-programme had the highest budget share (41%) whereas the storage, agro-processing and value addition sub-programme had the least budget share (2%) (Figure 3.1).

Figure 3.1: Percentage budget share for Agro-Industrialisation sub-programmes for FY 2023/24 as at 30th June 2024



Source: Authors analysis of budget data.

The agricultural financing sub-programme had a very good release performance owing to supplementary budget to the UDC of Ug shs 46.467bn and funds brought forward from FY2022/23. Its expenditure performance, however, was low due to no implementation of planned investments by the UDC. The storage, agro-processing and value addition sub-programme had the least budget release. (Table 3.2)

Table 3.2: Performance of the domestic budget for the Agro-Industrialisation Programme as at 30th June, 2024

Sub-programme	Budget (Ug shs bn)	Release (Ug shs bn)	Spent (Ug shs bn)	% of the budget released	% of the release spent
Institutional Strengthening and Coordination	473.873	467.263	422.229	98.6	90.4
Agricultural Production and Productivity	502.585	457.307	444.36	91	97.2
Storage, Agro-Processing and Value addition	28.086	21.568	19.185	76.8	89
Agricultural Market Access and Competitiveness	43.252	42.646	41.445	98.6	97.2
Agricultural Financing	175.887	175.887	133.643	100	76
Total	**1,223.684**	**1,164.671**	**1060.863**	**95.2**	**91.1**

Source: IFMS and field findings

3.1.2 Outcome performance

The programme outcome performance was very good for the Agricultural Production and Productivity; Storage, Agro-Processing and Value Addition and Agricultural Market Access and Competitiveness sub-programmes whereas the Institutional Strengthening and Coordination sub-programme had a fair achievement of the intended outcomes. The share of the agricultural exports to total exports was at 35% above the target 32% with an export value of US$ 2.5 billion. The level of postharvest losses reduced to 16.4% in relation to the target 18% which was very good performance. However, the number of farmers adopting improved agricultural technologies was still low at 39.5%.

The growth of the economy by 6 percent in FY 2023/24 compared to 5.3 percent in FY 2022/23 was attributed to increased production in agriculture, industry and associated services. The agriculture, forestry and fisheries sector grew by 5.1% in FY 2023/24 from to 4.5% in FY 2022/23. The highest growth was in the livestock sector (7.9%) followed by cash crops (7.6%), Agricultural Support Services (7.2%) and Food Crops (5.1%) while growth declined in the Fishing sector from 3.4% in FY 2022/23 to -1.9% in FY 2023/24[7]. The decline in the fisheries sector was associated with over exploitation and overfishing of capture fisheries, increased water pollution of water bodies, illegal fishing, limited growth of the aquaculture industry, and high prices of fish feeds and fishing equipment.

During FY2023/24, a total of 6,126,397 (60kg) coffee bags were exported at US$1.14bn. The quantity and value of coffee exported during FY2023/24 increased by 6.3% and 34.7%, respectively in comparison to FY2022/23. However, the quantity exported was below the targeted 7.5 million bags by 18.3%. This was attributed to the incidents of pests, especially the black coffee twig borer among others. A total of 64,330 bales of cotton (each 185 kg) were produced; 5,156 bales were consumed domestically, and 59,174 bales were exported; 77% of bales exported were classed/graded in the top 3 cotton quality grades.

3.1.3 Overall performance

Overall, good performance (73.6%) was realised in the Agro-industrialisation Programme during FY 2023/24, although some sub-programmes underperformed **(Table 3.3)**.

Good performance was mostly contributed by the Storage Agro-Processing and Value Addition Sub-programme (87.4%) that had a minimal budget share in the Agro-industrialisation Programme of 3.53% This sub-programme attracts additional financing under the private sector and other government entities such as Uganda Development Bank, Microfinance Support Centre Ltd, Private Sector Foundation, Private Sector Development Programme and hence the good performance.

This was followed by the Agricultural Production and Productivity subprogramme (84.90%) that had the highest budget share (41%). The least contribution to performance was by the Institutional Strengthening and Coordination Sub-programme (59%) yet it attracted the second largest share of the programme budget (38.72%). Most resources in this sub-programme were for salary enhancement of scientists and building administrative infrastructure some of which were not yet

[7] MFPED, 2004. Background to the Budget

completed or operational. These interventions would have impact in the medium to long term on the programme outcomes.

Table 3.3: Overall performance of the Agro-Industrialisation Programme by 30th June 2024

Sub-programme	Score (%)	Performance Rating	Remark/Highlights
Agricultural Production and Productivity	84.9	**Good**	The sub-programme achieved most of the output and outcome targets. Notable achievements were the establishment and equipping of infrastructure for agricultural research, administration, and animal breeding. There was a net increase of 2,312 cattle in the sampled six farms of NAGRC&DB. There was poor performance in semen production, dissemination and use by farmers due to partial functionality of Nitrogen plants and the artificial insemination cold chains. Good performance was realized in the generation and dissemination of new technologies to farmers. Innovative market-oriented products and engineering solutions for supporting agro-industrialisation and import substitution were under production. Substantial progress was made by MAAIF and MWE in provision of water for production and mechanization services to farmers. However, there were cases of non-functional facilities due to incomplete installations and abandonment of sites by contractors. The staffing of agricultural extension workers was low with 3,790 filled positions (43.6%) compared to the approved norms. Inputs were distributed to farmers and value chain development was achieved for some strategic commodities and no others.
Storage, Agro-Processing and Value Addition	71.0	**Good**	The sub-programme achieved most of the output and outcome targets. Cumulatively, 358 farmer organisations were supported under the Agriculture Cluster Development Project with inputs and technologies and matching grants for value addition machinery and storage facilities. The completed storage facilities had a capacity of 82,514 metric tonnes. Of the 291 farmer groups that installed value addition machinery, 199 were operational while 92 were not operational. The agro-processing facilities that were established or supported by the Uganda Development Corporation were at varying stages of operationalization and production. Most established facilities were either non-functional or operating at lower capacity
Agricultural Market Access and Competitiveness	87.4	**Good**	The sub-programme achieved most of the output and outcome targets. The Dairy Development Authority inspected a total of 3,754 milk handling premises and undertook enforcement and surveillance operations. The Uganda Coffee Development Authority inspected 3,413 entities involved in the coffee value chain. The department of crop inspection and certification developed and rolled out the digital Seed Traceability and Tracking system (STTS) to help improve on the seed certification process. A

Sub-programme	Score (%)	Performance Rating	Remark/Highlights
			total of 174 seed company representatives, seed dealers and stockiest were trained in the use of this system. The construction works for the National Metrology Laboratory at the Uganda National Bureau of Standards was completed. The renovation of the National Semen Laboratory was 65% complete. Access roads and road chokes were constructed with support from the ACDP, MAAIF and MOLGs.
Agricultural Financing	65.6	**Fair**	The sub-programme averagely achieved the planned output, and outcome targets. The funds available for lending under the Agricultural Credit Facility amounted to Ug shs 80.697bn including a subvention of Ug shs 31 bn from MFPED and repayments from PFIs worth Ug shs 49.697 bn. The PFIs disbursed Ug shs 59.342 billion to 485 farmers/firms, with a government contribution of Ug shs 28.241 billion; Ug shs 0.495 bn was spent on ACF marketing operations. The number of borrowers increased by 49.7% in FY 2023/24 in comparison to the previous FY2022/23; however, the value decreased by 51.7%. The block allocation modality emerged as a pivotal strategy in facilitating access to finance for micro and smallholder farmers. A total of 254 loan facilities were given out under the block allocation representing 51.6% of the loan facilities. However, the total value of the block allocation was low Ug shs 1.449 billion (2.4% of the total value of loans). The introduction of the Agricultural credit system at Bank of Uganda shortened the loan processing time for beneficiaries
Institutional Strengthening and Coordination	59.0	**Fair**	The sub-programme averagely achieved the planned output and outcome targets. Major achievements were made in the of laws, regulations, guidelines and procedures for crop, livestock and fisheries inspection, production, handling and management. Administrative offices were established to bring services closer to farmers. There was continuous development and roll out of online digital systems; partnerships and collaborations were expanded to foster agro-industrialisation and the PDM was fairly implemented.
Average	**73.6**	**Good**	The programme achieved most of the output and outcome targets

Source: Field findings

Good performance was attributed to strategic investments such as in the Agricultural Credit Facility (ACF), Parish Development Model (PDM) and donor financed interventions especially the Agriculture Cluster Development Project (ACDP) and Agricultural Value Chain Development Programme (AVCP); innovative approaches in research and technology generation; faster processes due to introduction of digital technology; provision of agro-inputs, value addition and agro-processing equipment; favourable climatic conditions; multi-year investments in agricultural infrastructure and equipment; provision of water for production and mechanisation; and increased

off budget support by private sector, bilateral funding organisations, local businesses and community counterpart funding.

Under performance in some areas was due to budget cuts; end of donor and off budget support leaving some of the outputs partially implemented; late releases and disbursements of both GoU and donor financing to implementing agencies. This resulted in late procurements and scaling back of work plans to less than 50% of planned outputs; restrictions on movement and sale of livestock due to the high prevalence of Foot and Mouth Disease (FMD) in the cattle corridor; encroachment on Government land; and sub-optimal performance or non-functionality of established agro-processing equipment due to lack of power connections, and inadequate raw materials and working capital.

3.2 Agricultural Production and Productivity Sub-Programme

3.2.1 Introduction

The Government of Uganda aims to commercialize agriculture through increased production and productivity of strategic commodities for export and food security. Budget expenditures during FY 2023/24 focused on strengthening agricultural research and technology development; extension system; input markets and distribution systems; access and use of water for production, agricultural mechanization and digital technologies; farmer organizations and cooperatives; systems for management of pests, vectors and disease; promoting sustainable land and environmental management practices and implementation of the Parish Development Model (PDM).

Performance

The overall performance of the Agricultural Production and Productivity sub-programme was good rated at 84.90% (Annex 2). Good performance was noted in establishment of research and breeding infrastructure, generation and dissemination of new technologies and innovations, formation of collaborations and partnerships to improve the value chains for strategic commodities, control of pests and diseases.

3.2.2 Agricultural research and technology development strengthened

Introduction

Agricultural research and technology development was jointly undertaken by the National Agricultural Research Organization (NARO) and the National Animal Genetic Resource Centre and Data Bank (NAGRC&DB). The aim was to strengthen seed and breeding systems as a means of improving seed availability, incomes and food security and nutrition at household level. The performance highlights of this intervention during FY 2023/24 are presented below.

Performance

i) **Invest in new and rehabilitate old infrastructure for agricultural research and animal breeding.**

a) **Research and administrative infrastructure constructed, rehabilitated and maintained.**

Good performance (87.80%) was realized in establishment and equipping of infrastructure for agricultural research and administration at the NARO Institutes and Zonal Agricultural Research

Development Institutes (ZARDIs) as presented in **Table 3.4.** However, some of the works were behind schedule due to the increase in scope of works and unfavourable weather conditions. Some completed facilities were non-functional due to lack of equipment, professional staff and operating budgets. For example, Veg Seed Facility in Mukono ZARDI was not operational due to lack of equipment and operations budget from GoU as was agreed in the KOICA-NARO memorandum of Understanding. KOICA committed to building the structures only.

Table 3.4: Performance in construction/rehabilitation/equipping of agricultural research infrastructure at NARO Institutes and ZARDIs by 30th June 2024

Category	Infrastructure established	Physical progress	Beneficiary institution	Remark
Residential	Residential staff blocks	100%	Maruzi	The facility was under use
	NARO-KOICA Veg Seed Facility	100%	Mukono ZARDI	The facility was completed by KOICA and handed over to NARO in July 2024 for experimenting and development of certified vegetable seeds (sharot onions, tomatoes, cabbage, herbs, spices). The facility was non-operational due to lack of funding from the Government. The partnership documents specified that KOICA would build, and GOU would equip and operate the facility
	Multi-purpose Vaccine Research and Production Facility	50%	NALIRRI	The facility was remodeled, and additional works issued in May 2024. The research and development section was completed and commissioned. 50% of the equipment was installed in the facility. The pending 50% construction work was awaiting installation of the remaining equipment.
	Food Biosciences Laboratory renovated	98%	NARL Kawanda	Project was behind schedule
	Administration Block constructed	100%	NARL-AEATRC	In defects liability period
	Equipment for Alfasafe Facility procured	99%	NALIRRI	Installation of equipment was completed, and the facility was functional
	Calf and heifer barn constructed and equipped	100%	NALIRRI	Installation of equipment was ongoing
	Livestock Nutrition Laboratory renovated (LOT 2)	85%	NALIRRI	Project was behind schedule
	Goat research facility and queen bee rearing facility	65%	Maruzi	Incomplete and abandoned by the contractors
Civil works Structures	Gravitational Flow Irrigation System for rice research	89%	Mukono ZARDI	Behind schedule against a 100%-time progress of the donor financed AVCP. The works stalled due to rain and the contractors had abandoned the site. Some parts of the scheme were not well levelled,

Category	Infrastructure established	Physical progress	Beneficiary institution	Remark
				increasing the risk of flooding during heavy rains. The banks and road were not stabilized
	Perimeter wall and incinerator at the vaccine facility	95%	NALIRRI	The works were substantially completed.
	Biosafety Security Gate	99%	NALIRRI	The works were substantially completed.
	Water extension project	100%	Maruzi	The contractor was in the process of addressing snags such as leakages on the water reservoir, worn out pipes
	19,000 cubic metres water reservoir	92%	Kigumba farm	Construction works were delayed by rains and flooding.
	Diversion of access road from the Vaccine Research Facility from NaCCRI to NALIRRi	100%	NALIRRI	Works were completed
	Renovation of Feed mill	80%	Kajjansi ARDC	The contract was behind schedule against time progress of 100%
	Paddocking system and farm access roads	40%	Maruzi	Progress was at 40% against a completion target of 80%.
	Perimeter wall fence constructed at the NAROSEC	60%	NARO Secretariat	Project was behind schedule
	Additional 1.2Km road civil works	92%	NALIRRI	The works were substantially completed.
	Water reservoir constructed	100%	Kigumba	Works completed under Phase I
	Average	**87.80%**		

Note: AEATREC - Agricultural Engineering and Appropriate Technology Research Centre; ARDC - Aquaculture Research and Development Centre; *NALIRRI – National Livestock Resources Research Institute; NARL – National Agricultural Research Laboratories.*

Source: Field findings

L-R: Completed Biosafety Security Gate and road works and Vaccine testing and quality control equipment that was installed at NALIRRI Nakyesesa, Wakiso district.

L-R: Completed Administration Building at NARL-AEATREC in Kawanda Wakiso district and completed but non-operational NARO-KOICA Veg Seed Facility at Mukono ZARDI in Mukono district.

L-R: Incomplete abandoned goat rearing facility at NALIRRI Maruzi in Apac district.

Animal breeding, production and administrative facilities constructed and equipped.
Good performance (78.84%) was realized in the establishment of breeding and administrative infrastructure at NAGRC&DB farms as shown in **Table 3.5.** Some structures were either incomplete or non-operational due to inadequate funding, abandonment of sites by contractors and lack of equipment. There were a few instances of misuse of incomplete infrastructures such as the conversion of the calf pen into a hay storage facility at Rubona Stock Farm in Bunyangabu district.

Table 3.5: Performance in development and equipping of breeding and administrative breeding infrastructure at selected NAGRC&DB farms by 30th June 2024

Farm	Infrastructure established	Completion progress (%)	Remark
Aswa Ranch *Pader district*	Farm Managers House and Honey Processing Equipment	100%	Substantially completed.
	Junior staff quarters and 4 stance pit latrine	74%	The project was behind schedule
	Hostel	75%	Behind schedule
Bull Stud Entebbe *Wakiso district*	Semen Laboratory	58.1%	Behind schedule against a 100%-time completion rate due to flooding of site and delayed clearance of two certificates. Refurbishment of the existing laboratory and external works had not started. A key risk was that the project was likely not be completed within the time frame of the donor financing under the AVCP with a drawing limit date of 29th June 2025.
	Gene Bank/MAAIF Headquarters	85%	Project was lagging behind schedule with a time progress at 100%. The completion date was extended from 30th June 2024 to 30th October 2024. Ug shs 4.435 bn (89%) out of the contract sum of Ug shs 4.984bn was paid to the contractors. The project scope was adjusted downwards with the external works worth Ug shs 208.789 million removed from the current contract.
National Poultry Development Centre *Wakiso district*	Poultry structures and equipment	100%	A total of 67.5 acres of land were procured and titled for the centre. Poultry structures were completed.
Kasolwe Stock Farm *Kamuli district*	Grain Storage facilities	78%	Works had stalled due to inadequate releases.
	Floating Fish Feed Production Plant	67%	
	150 capacity cattle shed	100%	
	Hostel	43%	
	Learning Centre	88%	
	Farm gate, low-cost security housing and U-shaped bio-security ramp	38%	
Livestock Experimental Station (LES) *Wakiso district*	Hatchery Facility	95%	Two incubators with total capacity of 60,200 egg setting capacity were installed and were functional
	Piggery Unit	100%	The structure was operational
Nshaara Ranch *Kiruhura*	Five Hay barns	100%	
	15 concrete silage bunkers	100%	Completed

Farm	Infrastructure established	Completion progress (%)	Remark
district	Farm gate, low cost security housing and U-shaped bio-security ramp	38%	Stalled
Rubona Stock farm *Bunyangabo district*	8 junior staff quarters and three stance pit latrine	67%	Stalled
	Hostel block	100%	Completed but not in use due to lack of electricity and water connections
	Three silage bunkers	100%	Completed but not in use due to lack of funding to produce feeds
	1.5Km perimeter fencing and road from gate to administrative building constructed	100%	Were in use
	Three troughs constructed	100%	Were in use
	Calf pen	95%	The facility completion stalled for three years; pending were shutters, feeders, and drinkers. The facility was used for other purposes other than the intended purpose. It was used for storing animal feeds and the Nitrogen plant.
Ruhengyere Field Station *Kiruhura district*	Farm Managers House	70%	Delayed works as the contractors abandoned site at times. The house was roofed, and door and window frames were installed
	Solar installation	0%	The project was handed over to the contractor who did not implement.
Sanga Field Station *Kiruhura district*	Five silage bunkers	100%	Were not in use due to lack of polythene materials for packing/covering the feeds
	Average	**78.84%**	**Good performance**

Source: Field findings


L-R: Hay barns that were constructed and were in use at Nshaara Ranch in Kiruhura district and completed hostel at Rubona Stock Farm in Bunyangabu district that was not in use due to lack of power and water connections.


L-R: Completed silage bank at NAGRC&DB Maruzi ranch in Apac district and stalled construction of Farm Managers house at Ruhengyere Field Station in Kiruhura district.


L-R: Some of the parts for construction of grain storage silos at Kasolwe Stock Farm abandoned on site and the partially completed calf pen that was misused for storage of hay at Rubona Stock Farm in Bunyangabu district.

b) Animal breeding stock multiplied and distributed to farmers.

Fair performance was realized in animal breeding at NAGRC&DB stations with a net increase of 2,312 cattle in the sampled six farms, and a modest increase in goats and poultry **(Tables 3.6 and 3.7).** Animals were distributed to farmers through disposal of breeding bulls or provision of semen. The loss of animals was a key constraint associated with high disease prevalence, inadequate supplies of drugs by NAGRC&DB headquarters; predators due to inadequate bush clearing; frequent donations of animals; dilapidated breeding infrastructure, old herds, and land encroachment.

Table 3.6: Progress in multiplication of cattle breeding stock at selected NAGRC&DB farms by 30th June 2024

Farm	Opening Stock 1st July 2023	Closing Stock 30th June 2024	Net change	Remark/Challenges
Bull Stud Wakiso district	26	42	16	22 improved bulls were imported with support of the MAAIF Agriculture Value Chain Development Project (AVCP); one bull died due to an unknown disease. Two bulls were transferred to Intensive Farmers Group in Kashari Mbarara district. One bull was disposed off after sustaining leg fracture. The old stock was aged and awaiting disposal
Livestock experimental station Wakiso district	146	58	-88	100 breeding bulls were disposed off to farmers; 20 animals died due to diseases and inadequate veterinary drugs
Maruzi Ranch Apac district	776	685	-91	Thirty-eight calves were born. 35 animals died due to diseases as a result of poor animal handling infrastructure especially the spray race and cattle crush and inadequate follow up of sick animals; 33 animals were donated to Lango cultural leadership and Hope Initiative Development Farm; 5 animals were slaughtered. Cattle theft was a key constraint
Nshaara Ranch Kiruhura district	3,986	5,508	1,522	Very good growth due to increased availability and storage of feeds after construction of 15 silage bunkers and purchase of 250 cattle to reduce inbreeding. Loss of animals due to attacks by buffalos from Lake Mburo National Park
***Ruhengyere Field Station** Kiruhura district	1,534	2,401	867	Good performance due to enhanced breeding infrastructure, more feeds. Constraint of inadequate drugs provided at 60% of what is needed, given the high prevalence of diseases
***Sanga Field Station** Kiruhura district	363	449	86	22 animals died due to diseases, the drugs were inadequate and not delivered in time. Three animals were slaughtered in December 2023
Total net change			**2,312**	

Source: Field findings

Table 3.7: Progress in multiplication of goat and poultry breeding stock at selected NAGRC&DB farms by 30th June 2024

Farm	Opening Stock 1st July 2023	Closing Stock 30th June 2024	Net change	Reasons/key challenges
GOATS				
Maruzi Ranch *Apac district*	472	501	29	131 animals were born. The numbers reduced with the death of 49 animals and 52 animals donated to different community and political leaders. Death was due poor goat houses, diseases and predation by pythons and foxes.
Sanga Field Station *Kiruhura district*	667	795	128	69 animals died due to diseases, predators, wild dog bites
[8]*Ruhengyere Field Station *Kiruhura district*	1251	1110	-141	High mortality due to poor housing facilities and diseases
Nshaara Ranch Kiruhura district		552	-	Loss of goats due to attacks by wild animals from Lake Mburo National Park and predators
Total net change			**16**	
POULTRY				
Livestock experimental station Wakiso district	4,573	4,573	0	Parent stock of Rainbow Rooster birds were procured
National Poultry Development Centre *Wakiso district*	9,056	7,044	-2,012	The Kuroiler parent poultry stock had a high mortality at 22% mortality) due to diseases. The two hatchery machines that were installed with the capacity of 120,600 hatchable eggs per week were operating at 30% capacity due to inadequate stock and operational funds to produce eggs; 30,000 chicks had been hatched and sold to farmers

Source: Field findings

Good quality breeding dairy animals at Rubona Stock Farm in Bunyangabu district

The Bull stud in Entebbe Municipality Wakiso district was 50% functional due to low use of artificial insemination (AI) services by farmers countrywide. Forty-two bulls were maintained at the Bull stud and a total of 56,528 doses (40%) of semen were locally produced against an annual target of 142,906 doses. A total of 103,285 litres of liquid nitrogen out of the annual target of 112,307 were dispatched to farmers.

The poor performance in semen production, dissemination and use by farmers was due to: partial functionality of the Nitrogen plants in Njeru and Mbarara due to missing spare parts; under developed AI cold chain; low AI conception rates at farm level due to poor handling of semen and nitrogen in the delivery system, unethical AI technicians and low investment in the required breeding inputs by farmers.

The brown Nganda cattle at Kamenyamiggo Satelite Station in Lwengo district

Some progress was made in training 207 LG technicians in AI technologies, with support from the district local governments (DLGs), Local Economic Growth Support Project (LEGS) and Development Initiative for Northern Uganda (DINU). Outreaches of breeding services in communities and training of farmers in improved animal production technologies continued but at a lower rate due to inadequate artificial insemination technicians and field vehicles.

Complementary animal breeding services were provided to farmers by NARO institutions, as part of the technology development processes. Thirty brown Nganda cattle were under conservation at Mukono ZARDI Kamenyamiggo Satelite Station in Lwengo district.

The Nganda cattle had failed to multiply over the past 15 years since they were brought to Kamenyamiggo from Tororo when NALIRRI was relocated to Maruzi in Apac district. The main constraint was low attention to developing the Nganda cattle technology in the country, with no supportive research and breeding infrastructure at the station.

Breeding and multiplication of the dual purpose Kuroiler was progressing fairly since October 2023 at the National Poultry Development Centre in Wakiso district. About 30,000 chicks had been hatched and distributed to farmers. The centre was at 30% functionality due to inadequate breeding and administrative infrastructure, staff, and operational funds. Indigenous poultry breeding was being implemented with a parent stock of 800 birds at Mukono ZARDI, with support from USAID Feed the Future Project that was scheduled to end in September 2024.The crossing of local Mubende goats with the exotic high yielding Karahari goats was ongoing in Bulindi ZARDI in Hoima district.

L-R: Brown Karahari goats and Black Mubende goats in the breeding programme at Bulindi ZARDI in Hoima district and Kuroiler parent stock at the National Poultry Development Centre in Wakiso district

Key challenges

i) Loss of animals on NAGRC&DB farms due to diseases, predators, inadequate drugs, and breeding infrastructure.
ii) Encroachment by senior citizens and allocations to private investors and other Government entities of public land at the various agricultural institutions affected research, breeding, and infrastructure development. For example, some established poultry and piggery structures at LES farm could not be used as they were condoned off by Entebbe Zamugula Buganda group that had encroached on 30 acres. The matter has remained unresolved for many years by the Buganda Land Board.
iii) Stalled projects and slow progress in establishment of breeding infrastructure due to inadequate releases.

ii) Establish Climate Smart Technology Demonstration and multiplication centres.

a) Demand driven agricultural technologies developed.

By 30th June 2024, good performance was registered in generation and dissemination of new technologies by the National Agricultural Research Organisation (NARO) Institute and ZARDIs including 12 new nutrient dense crop varieties for maize, rice, groundnuts, sweet potatoes and irish potatoes. Six candidate potato lines resistant to late blight disease with suitable chipping qualities and high yields and five varieties of Arabica coffee and two sunflower varieties were ready for release. Four fish feed formulations for Nile Tilapia and African catfish were developed and were ready for upscaling; 20,000 parent stocks of Nile Tilapia were generated and were distributed to farmers. Two new bean varieties were developed to replace the ones disseminated in previous years that were susceptible to bean root rot disease.

The construction of the Anti-Tick Vaccine Facility in Nakyesesa village Wakiso district was 50% complete awaiting full installation of equipment before works are completed. As at 30th June, 2024 (50%) of the equipment was installed. The research and development section of the Anti-Tick Vaccine was commissioned and equipment was undergoing pilot testing. A total of 28 technical staff were deployed by NARO to operate the facility, there was a staffing gap of 30 additional

professional staff. The field based clinical trials were completed in April 2024 and processes were underway to get the Biosafety Certificate and Licence to go into vaccine production. Research on the Foot and Mouth Disease (FMD) and African Swine Fever that was planned to be done in the Anti-Tick Vaccine Facility was stopped to avoid contamination.

Seed production systems were expanded in partnership with seed companies, local seed businesses, Universities, cultural institutions and private sector. The NARO signed 10 licensing agreements with ten seed companies to commercialize the improved varieties and collected royalties from five seed companies. A total of 175 metric tons of seed were generated through NARO Holdings Limited (NHL) and distributed to farmers.

However, despite the increased generation of agricultural technologies, most PDM farmers lacked access to good quality seed, breeds and agro-inputs, indicative of weak research-extension-farmer linkages; fake seeds with low viability (30% on average) were prevalent on the market due to poor inspection and enforcement of quality assurance regulations by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Local Governments.

The NARO conducted one social economic impact assessment for sorghum technologies. Preliminary results show that 59% of the farmers (sorghum-growing households) in the surveyed areas adopted the NARO sorghum varieties, the most popular being NAROSORG-1, NAROSORG-2, and NAROSORG-3. High adoption of these varieties was because they offered higher yields, had better taste, early maturity, and availability of the seed.

Research on oil seeds sesame and sunflower was conducted at slow pace due to inadequate release of funds under the NOSP projects. 14 sesame breeding lines were planted on six acres at technology validation centres and ZARDIs in 2024A. Ten acres of the released sesame varieties sem 2 and 3 were planted and harvested. Three groundnut varieties were released - NARONUT 3, 4 &5 and 30 acres of the released varieties were planted on-station at NASARRI. Breeding of sunflower was ongoing, and 50 hybrids were earmarked for further research of which 21 hybrids were taken for on farm trials and 10 varieties were ready for plant trials. Draft standard operating procedure (SOP) for black soldier rearing and tick entomopathic fungal measurement, efficacy and tick eggs and larvae in the Kraal were made. The subvention was majorly constrained by delayed release of funds.

Progress on testing and registration of Aflasafe – a biological control agent for Aflatoxin in grain crops was ongoing. Aflatoxin is a major grain quality and food-safety concern in Uganda affecting mainly maize, groundnut and sorghum crops. Two products code named UG01 and KE01 were formulated and were tested in over 500 farmers' field second season of 2023. Test results over seasons have shown both products to be effective and efficacious in control of Aflatoxin and will be used in integrated management approach to mitigate Aflatoxin contamination.

Application dossier for product registration and commercialization strategy have been developed. The Investor's forum for commercialization of Aflasafe was held on 19th October 2023 attracting several private sector actors that showed interest in marketing of Aflasafe. The operationalization and commercialization of Aflasafe is planned to start in FY2024/25.

b) Technology incubation centres established and operational

Technology incubation was progressing fairly at the NARO Institutes and ZARDIs aimed at generating innovative market-oriented products and engineering solutions for supporting industrialisation, import substitution and revenue generation. This was done in collaboration with private sector companies. Examples of ongoing work is given below:

Production of the prototypes of Coffee Antifungal Skin Care Product, Cocoa cosmetic products and alcoholic beverage from cocoa mucilage was ongoing at the National Coffee Research Institute (NACORI). The coffee skin care product received quality approval from the Uganda National Bureau of Standards (UNBS). With support from Feed the Future USAID, a vacuum emulsifier for mini-industrial processing of cosmetics, a soluble coffee extracting machine, and an essential oil distiller were procured and were under use at NACORI.

L-R: The Vacuum Emulsifier for cosmetics production and Essential Oil distiller were functional at NACORI at Kituza in Mukono district.

Dry white and red sweet banana wines were under production at Mbarara ZARDI. Four ready to drink tea beverages with flavours of lemon grass, rosemary, lemon-eucalyptus; tea supplements; purple tea varieties and one tea oil were produced by Rwebitaba ZARDI. A key risk was that most value-added technologies were partially developed as they depended on short term external funding that ended, and no Government of Uganda budget was allocated to complete the research.

Among the technologies under incubation at the Bio-Analytical and Nutrition Laboratory in the NACCRI were beer produced from yellow vitamin A fortified cassava; purple sweet potato wine rich in anti-oxidants against cancer; orange and purple sweet potato flour for baby foods and anti-oxidants; cassava biodegradable wraps for seedlings; cassava starch used in industries and pharmaceuticals as thickeners and activated charcoal for removing toxins from the environment. The anthocyanin mini extractor was installed and tested, in readiness for production of anthocyanins used as food colorants by the bakery and confectionery industry.

L-R: Highland banana wines were under development at MbAZARDI in Mbarara district; and sweet potatoes and cassava-based wines and beers developed at NACRRI in Namulonge, Wakiso district

iii) Upscale research on bio fortication and multiplication of nutrient dense commodities

Good progress was made in the generation of nutrient dense and value-added technologies, mostly by the NACCRI including:

- Two maize varieties bio-fortified with Vitamin A, usable in corn flakes and maize snacks
- Pre-cooked beans that were certified by the UNBS
- The formulation of a bean soup thickener (both powder and cubes) to replace imported wheat-based products such as Royco was on-going.
- Super Kawomera, a composite nutritious porridge designed for fighting malnutrition in children and mothers was undergoing upscaling with Nutreal limited.
- Eleven quick cooking (an hour or less) bean varieties were identified.
- Thirty-one (31) bean varieties with good canning quality were identified for the urban population.
- Two (2) prototypes of innovative products from vegetables and spices developed; a gluten free confectionary made of Nakati doughnut made from Nakati and blended spices.

3.2.3 Agricultural Extension System Strengthened

Introduction

This intervention has four sub-interventions namely; i) operationalize agricultural extension system; ii) Develop and operationalize an ICT-enabled agricultural extension supervision and traceability system; iii) Scale-up innovative extension models such as nucleus farmers in all agro-ecological zones; iv) Strengthen the research-extension-farmer linkages to increase uptake of new technologies; v) Develop and equip youth with knowledge, skills and facilities for access and utilization of modern extension services.

Performance

Overall, the performance of the agricultural extension system in District Local Governments (DLGs) and other implementing MDAs as at 30th June 2024 was fair. This was greatly attributed to inadequate and late release of funds. for instance, under MAAIF, all Q4 planned activities were not conducted. The production and marketing conditional grants to district local governments were

received in December 2023. This led to partial implementation of the planned activities and consequent rollover to FY2024/25.

Extension services received by farmers included; training on good agronomic practices; postharvest handling and management; and management of pests, vectors and diseases. The MAAIF procured and distributed vaccines to high risk and hot spots districts. The vaccines included foot and mouth disease and anthrax, among others.

Detailed performance of the monitored outputs is discussed below.

i) Operationalize agricultural extension system.

The MAAIF, through Agriculture Value Chain Project (AVCP) cumulatively trained 22,295 farmer groups, of which 1,872 received training during FY2023/24. The training empowered farmers with the knowledge, skills, and resources to operate their farms as successful businesses, to aid transitioning from subsistence to commercial agriculture.

The Dairy Development Authority (DDA) trained 3,429 dairy farmers (Male 2,368, Female 1,061, Youths 562, PWDs 64) in good dairy farming practices. The training focused on pasture establishment and conservation, animal health management, group dynamics and strengthening, clean milk production, milk quality assurance, testing and handling practices in all the milk sheds in the country.

Additionally, the DDA trained a total of 96 special interest dairy stake holders **(**PWD, HIV, Youth and Women) in dairy value addition and hygienic milk production, milk quality and testing, dairy cattle feeding (calf, heifer, pregnant and lactating cow), dairy cow mineral supplementation and mineral block making, Artificial Colostrum making and feeding, Hygienic milk production, Cattle disease prevention and control – with emphasis on dairy cattle diseases control and prevention. The groups were from hard-to-reach areas of Karamoja, Kabong, Nakapiripirit, and Katakwi.

The National Oil Palm Project (NOPP) in conjunction with Oil Palm Buvuma Limited (OPBL) trained Oil Palm Grower (OPGs) on ablation, circle weeding, minimum tillage practices, sanitary pruning, plat forming for palms on steep terrain, cover crop establishment and proper drainage. The NOPP promoted activities along the apiary value chain in Buvuma by facilitating the training of farmers in the management of honeybees and use of bee gear.

The Women's Resource Rights facilitators in Buvuma hub conducted trainings in 4 sub counties that attracted a total of 1,114 participants. The training involved land clinics on equitable recognition and enjoyment of land and resource rights (general and gender-specific) as well as enhance benefit sharing within the context of the NOPP and other IFAD- funded projects. **Table 3.8** shows the number of participants in the land clinics by sub-county.

Table 3.8: Training and sensitization of women on land rights in Buvuma Hub as at 30th June 2024

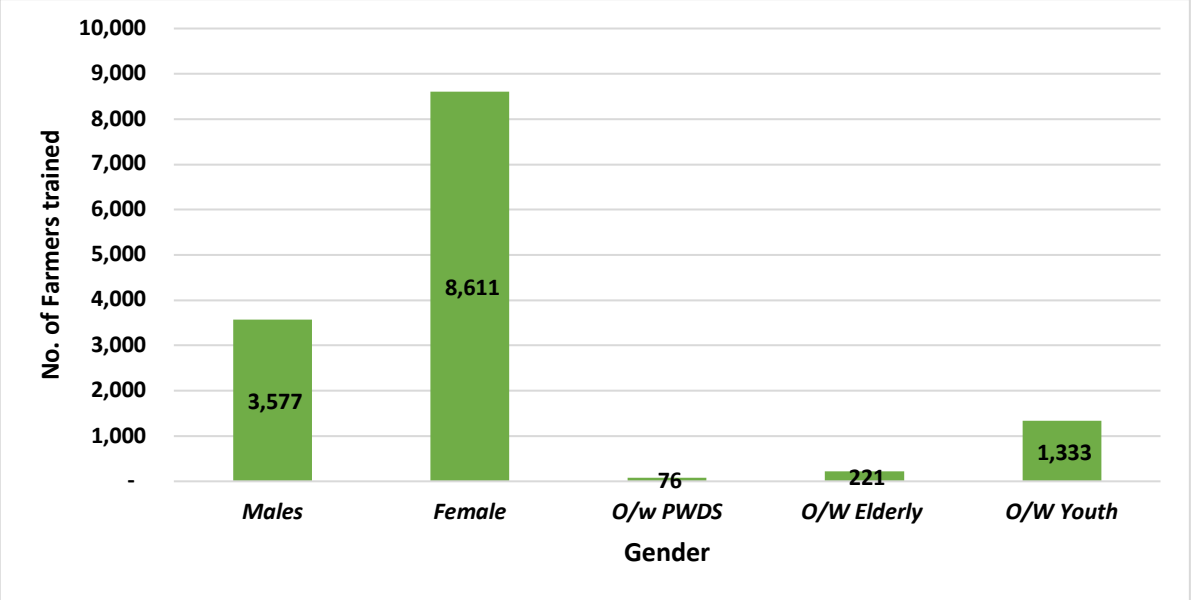
Sub county	Village	Number of participants
Nairambi	Kasari	115
	Lukale	108
	Tojjwe	112
Buvuma T.C	Kasimizi	92
	Kembo	113
	Ndotwe	103
Buwooya	Bukali	83
	Namatooke	77
	Kigobera	71
Busamuzi	Mpumudde	93
	Butende	71
	Bukagali	76
Total		**1,114**

Source: Field findings

The UCDA trained 84 Youths in brewing, skilling and baristas from various Hotels, Restaurants, and cafes. These were conducted at Munyonyo Speke Resort Hotel, Wash and Wills- Mbale and Lugogo,. The training was mainly focused on Basic Barista skills to enable trainees to brew high-quality coffee beverages and thus improve domestic coffee consumption.

Similarly, the UCDA conducted 1,870 farmer trainings that attracted 8,540 farmers in the 126 coffee growing districts. The trainings covered the following key topics: coffee rehabilitation, soil fertility management, soil and water conservation, pests and disease control, planting and farm establishment. An addition of 3,742 farm visits were conducted in the 8 coffee growing regions to complement farmer trainings and enhance adoption of good agronomic practices. Correspondingly, the UCDA trained 12,188 various farmers & Cooperatives in good agricultural practices across 126 districts. The gender and equity distribution of the farmers is shown in **Figure 3.2**.

Figure 3.2: Number of farmers trained on Good Agricultural Practices by 30th June 2024.



Source: Field findings

The Cotton Development Organization (CDO) in collaboration with the Uganda Ginners and Cotton Exports Association (UGCEA) mobilized over 125,000 cotton farming households and conducted 12,120 training sessions. The training covered cotton growing sub-regions of Busoga, Bukedi, Teso, Lango, Acholi, West Nile & Mid-Western. The training covered broad topics of pest, soil & water management & harvesting & postharvest handling. Extension messages on pest control, indicative prices & post-harvest handling were also broadcasted on local radio stations.

The CDO also trained 352 extension workers on production whereby; 197 were from Uganda Ginners Cotton Exporters Association – UGCEA and 155 from lower local governments in the districts of Amolatar, Pader, Nebbi, Alebtong, Tororo, Gulu, Kitgum & Obongi. Topics covered included farmer mobilization & group formation, land preparation & planting, crop & pest management, soil & water conservation, harvesting & post-harvest handling. However, there was a low outreach to cotton farmers due to the understaffed area coordinators/ extension staff in most of the monitored regions.

Constraints to the full operationalization of agricultural extension services.

By 30th June 2024, the staffing of extension workers at the national level was low with 3,790 filled positions (43.6%) compared to the approved staffing norms of 8,688 leaving a gap of 4,898 (56.4 %) positions. On average, the ratio of extension worker to a farming household was 1:1800 against the approved standard of 1:500. For example, Nwoya DLG was at 17%; Buvuma DLG at 36%; Bushenyi DLG at 34% and Bugweri DLG at 24% extension workers staffing level. Similarly, under NAADS there was limited access to extension services by farmers for emerging high value crops such as Hass avocado, macadamia, and cashew nuts.

Adequate access to agricultural extension services by some farming households was constrained by lack of functional means of transport by most staff. Out of the 3,790 substantive extension workers 73.9% had reliable and sound transport equipment. For example, in Nebbi DLG 1/3 of the extension staff lacked means of transport.

ii) Develop and operationalize an ICT-enabled agricultural extension system.

The MAAIF, through the Department of Agricultural Extension and Skills Management (DAESM) developed the Agriculture Extension and Advisory System (AEAS). The system files were installed onto the NITA-U servers and can be accessed on the domain; www.extension.agriculture.go.ug. Training of trainers was conducted and the e-diary module was piloted out in 84 districts. The other modules of the system were yet to be piloted. Final commissioning of the developed system was pending completion reporting module.

Through MAAIF, the Agriculture Extension and Skills Management rolled-out the E-diary to 35 Districts where a total of 1,750 staff were to be trained on the system use. These were CAOs, ICT Officers, DPOs, Veterinary, Agriculture, Fisheries, Entomology and Agricultural Engineers. However, out of the planned districts only training transpired in the Districts of Kazo, Kanungu, Rukungiri, Kisoro, Luwero, Nakaseke, Nakasongola Nakapiripirit and Moroto, in E-extension system for real time supervision of extension services.

Challenges

i) Lack of field operational tools and equipment such as GPS and weather forecast tools among local governments.
ii) Weak coordination between the MAAIF DAES and other sister departments like NAADS-OWC affected the effectiveness of extension service delivery
iii) Budget cuts and late disbursements to the Department of Agriculture Extension and Skills Management (DAESM) led to limited implementation of some planned activities.
iv) Understaffing and limited transport means for the few extension staff.

Recommendations

i) The MAAIF should prioritize funding for extension services to cater for increased staff recruitment and their operational expenses at the LG level.
ii) The MAAIF should strengthen internal collaboration between its associated agencies to improve extension delivery at the LG level.
iii) The MFPED, MoPS, MAAIF and LGs should prioritize recruitment and equipping more extension workers. The MAAIF and other agencies should further strengthen and support extension services and farmer group cohesion.

3.2.4 Agricultural input markets and distribution systems strengthened to adhere to quality standards and guidelines

Introduction

This intervention has five focus areas and aims to; i) enforce pre-export verification for all agricultural inputs at source of origin; ii) establish and equip nine regional mechanization centers to increase uptake of agricultural mechanization and labour saving technologies; iii) reform the current input subsidy program including: scaling up the e-voucher model of inputs distribution; iv) setup and equip farm service centers within the public service e-service centers for bulk input procurement, storage and distribution; and v) regulation for improved inputs and new seed varieties.

Performance

The development of the value chains for key commodities remained fragmented with most interventions still concentrated at the production level and not fully translated through the value chain stages up to marketing. Value chain development was achieved for some commodities and not for many others. The commodities with the most advanced value chains were coffee, cotton, dairy, fruits, maize, rice, tea, and oil palm. The value chains that were largely underdeveloped included poultry, fish, piggery, bananas, cassava, Irish potatoes, millet, Hass avocado, macadamia, beans, soya bean, sorghum and cashew nuts. The detailed performance of the monitored outputs is given below.

i) Enhanced efficiency in input distribution

a) Inputs procured, generated, distributed, and accessed

During FY2023/24 various agricultural inputs were procured and distributed to different institutions and farming households by several programs and agencies as shown in **Table 3.9.** Under the Agriculture Cluster Development Project (ACDP), the e-Vouchers subsidies were provided to 17,241 farmers (Maize, coffee, cassava, Beans, Rice) in 12 project clusters. Cumulatively a total of 411,872 farmers received inputs through the e-voucher. A total of Ug shs 148.96 billion was spent by the project on provision of inputs where farmer contribution totaled to Ug shs 43.8 billion and government contribution was Ug shs 105.17 billion.

Table 3.9: Agricultural inputs distributed to monitored entities by 30th June 2024

Entity/ Project	Type of input/ Commodity	Quantity distributed	Remarks
CDO	Pesticides (Units)	31,306	25,010 units of pesticides were distributed to farmers in 10 hard to reach districts. Farmers, including the 350 women and 200 youths' groups, were trained on proper use & storage of pesticides using demonstration plots.
	Knapsack spray pumps (Number)	1,408	Were distributed to 10 Regional Inputs Bulking Centers in Iganga, Tororo, Bukedea, Lira, Kitgum, Gulu, Pakwach, Nebbi, Kasese & Masindi.
	Assorted Protective wear (Pieces)	709	(overalls, gumboots, gloves, safety boots, goggles, ear plugs) to Pajule and Kasese Seed dressing stations.
	Cotton planting seed (MT)	2,010	These delinted, graded & packed seeds were produced at Pajule & Kasese of which 775 Mt were transferred to field stores awaiting distribution to farmers.
NAADS	Macadamia seedlings (Number)	143,420	These were distributed to 34 DLGs under the nucleus farmer partnership involving out growers to establish 1,434 acres
	Cashew nuts seedlings (Number)	233,082	These were distributed to 22 DLGs to establish 3,329 acres
	Hass Avocado Seedlings (Number)	733,160	These were distributed to 80 DLGs under the nucleus farmer partnership involving growers to establish 4,582 acres.
	Sunflower seed (kgs)	72,748	These were distributed to the 60 farmer cooperatives and 12 large-scale farmers in Acholi and Lango sub regions to establish 36,374 acres.

Entity/ Project	Type of input/ Commodity	Quantity distributed	Remarks
	soya bean seed (kgs)	231,760	This was distributed to districts in Lango and Acholi sub-region for planting 9270 acres targeting 57 cooperatives and 12 large-scale farmers in 11 DLGs of Acholi and Lango sub regions.
NAADS	Improved Pigs (Number)	3097	These were distributed to selected beneficiaries in 34 DLGs under strategic interventions targeting mainly youths, women, and other special interest groups in all parts of the country,
	Heifers (Number)	500	Was distributed to beneficiaries targeting mainly youths, women & other special interest groups in Busoga sub region (Mayuge, Bugiri, Iganga, Bugweri, Namutumba, Buyende, Namayingo, Kaliro, Jinja, Luuka & Kamuli) under improved heifer initiative and 118 heifers were distributed to other special interest groups under strategic interventions,
	One-day old broiler chicks (Number)	68,400	All distributed
	Broiler starter pellets (kgs)	68,400	All distributed
	Broiler growers' pellets (kgs)	102,600	Was distributed to selected beneficiaries in 13 DLGs targeting mainly special interest groups, especially youth and women and beneficiaries in urban and semi-urban areas
	Brooded rainbow chicks (Number)	23,000	These were distributed to selected beneficiaries in Katakwi and Namutumba districts under strategic interventions.
	Tilapia Fish fingerlings (Number)	1,579,228	These distributed to farmers in 21 DLGs under strategic interventions targeting youths, women, and other interest groups across the country.
	Catfish fingerlings (Number)	529,443	
	Fish feed (kgs)	58,706	
UCDA	Shade trees (Number)	100,000	Procured & distributed shade trees to farmers in Eastern, Rwenzori & Northern Uganda, 851 Liters of Imidacloprid to farmers across the coffee growing regions.
	KR Plantlets (Number)	43,250	These were resistant to Coffee Wilt Disease for establishment of mother gardens. 90% of farmers who received coffee seedlings were able to plant them all. However, 57% of the gardens had been infested by pests & diseases.
	Mucuna seed (kgs)	200	These were distributed to 84 farmers for mitigating effects of climate change through, conserving moisture during the dry season, suppressing weeds and fixing nitrogen
	Copper based	2,352	These were distributed to all the coffee growing areas

Entity/ Project	Type of input/ Commodity	Quantity distributed	Remarks
	fungicide (kgs)		
DDA	Pasture seeds (kgs)	1,708	Inputs were procured and distributed to various dairy farmers across all the regions
	Nappier (Bags)	400	
	Caliandra (Seedlings)	1,000	
	Potted bracharia (seedlings)	10,750	

Source: Field findings

Through MAAIF, the Agriculture Value Chain Development Project (AVCP) supported NARO-NACRRI to produce 45.9 MT of maize foundation seed and 2.177 Mt maize breeder seed. This aimed at increasing maize yields from 1.5 to 3.0MT/Ha. Additionally, the project procured 546.5 MT certified Open pollinated maize seed and 705.8MT certified Hybrid maize seed and distributed to farmers in the project district in season 2023B.

Cumulatively, AVCP procured a total of 869.85 MT certified rice seed and 1,536 MT rice fertilizers for farmer demonstrations. A total of 13,516 rice farmers received inputs and established demonstration gardens in the project districts using the certified rice with 40% being female headed households and 25% youth across the entire project area.

In the same way, AVCP contracted NILE-RAID Ltd to undertake technical agricultural extension and agri-business development services covering the maize and rice value chains in a total of 20 districts in Eastern and Northern Uganda. In the months of September and October 2023, MAAIF delivered various inputs (fertilizer, pesticides, maize and rice seed) at Nile raid ware houses in Northern region (Gulu) and Eastern region (Soroti), some of the inputs were distributed to farmers in 2023 season B and the rest stored in preparation for the subsequent 2024 season (Season A) as reflected in **Table 3.10**. By 30th June 2024, Nile Raid handed over the remaining inputs to MAAIF, that were later distributed to farmers in the districts of; Butaleja, Bukedia, Soroti, Amuria and Iganga.

Table 3.10: AVCP farming inputs received and distributed to farmers by Nile-Raid Ltd as at 30th June 2024

Input Type	Description	Received (Kgs)	Dispatched / Distributed (kgs)	Balance in Store (kgs)
Maize Seed	Hybrid	85,040	85,040	-
	Open Pollinated Variety	88,000	88,000	-
Rice Seed	Generation (GEN)	644,000	528,070	115,930
Fertilizer	NPK 20:20:18	2,016,000	2,016,000	-
	NPK 23:23:17	990,000	425,200	564,800
Pesticides	DuduCyper (boxes)	533	533	-
	Dudufenos (boxes)	1577	997	580

Source: Field findings

Examples of beneficiaries'/farming households for agricultural inputs distributed by different entities;

By 30th June 2024 under Seed multiplication CDO had commenced mobilization of seed growers; 33 Prison Farms were identified for seed multiplication and 7 Prison Farms were handling multiplication of BPA 2015A & B cotton varieties. In that regard, 38 Mt of BPA 2015A & B seed were supplied to the 7 Farms. Additionally, about 910 kg of BPA 2015A Foundation Seed were supplied to CDO by NARO's Cotton Research Program at National Semi-Arid Resources Research Institute(NASARRI) in Serere for further multiplication at Mubuku Prison Farm. Below are some of the prison farms visited **Table 3.11.**

Table 3.11: Performance of cotton interventions in selected Prison Farms by 30th June 2024

Prison station	Location (District)	Target acreage	Remarks
Ragem	Pakwach	550	They partially planted cotton seeds. The germination rate was estimated at 50% due to unfavourable weather.
Loro	Oyam	350	They planted less acreage compared to the initial target because part of the land was given to prison staff to plant food crops. The Prison lost 50% of the crop planted failed due to harsh weather.
Erute	Lira city	50	The plant was affected by drought that led to the loss of five acres of the crop.

Source: Field findings

Ragem prisons cotton farm in Ragem upper Pakwatch district (Left) and Lolo prisons cotton farm in alutkot parish Loro subcounty Oyam district (Right) both affected by harsh climatic conditions in the region.

Anguyo Joel's cashew nuts seedlings stored under a tree shade in Lodonga town council Yumbe district.

Anguyo Joel a farmer in Timbakwa, Galaba parish, Lodonga town council Yumbe district received 896 seedlings of cashew nuts in May 2024, at the time of monitoring he had not transferred the seedlings to the main garden due harsh weather conditions.
His key challenge was lack of irrigation system, yet the available water source was distant. In addition, the dry spell led to the loss of his seedlings.

The MAAIF, through the National Oil Palm Project (NOPP) distributed assorted 30 beehives and assorted protective gears to Nabuki Environmental Conservation Association in Mubale village Namugombe parish Nairambi subcounty Buvuma district in June 2024. However, the project site lacked a protective fence making the project (hives) vulnerable to wild animals such as monkeys, which frequently topple the beehives.
Similarly, Bugembe Musa, a NOPP farmer in Nassuba village Buzibwera parish kiboga town council Kiboga district received 30Kgs of soya bean between months of August to December**.** However, he lost 50% of the crop due to drought and poor harvesting practices.

b) Oil palm seedling nursery established and planted
The National Oil Palm Project established 2,496.12 ha of nucleus estate oil palm. During FY2023/24 a total of 204.58ha of oil palm plantations were established by small scale oil palm growers (OPGs) bringing the cumulative acreage by OPGs to 1,728.4ha in both Buvuma and Mayuge hubs. Examples of monitored farmers are presented in **Table 3.12**. A total of 160,000 new seedlings were planted at the nucleus nursery in Buvuma and were expected to be ready for transplanting in March 2025. It was observed that the Mayuge hub did not have a nursery and planting materials had to be ferried from Buvuma hub which was constraining the timely planting.

In order to augment efforts to restore degraded sites, in FY2022/23, a 40,000-tree seedling nursery was established at Namunyolo Local Forest Reserve, in Buvuma Hub. The nursery was a training site for training of 22 trainers, female members of Kojja-Tojjwe Environment Conservation and Tree Planting Association (KECTPA).

Table 3.12: Examples of oil palm acreage established by farmers in Mayuge district by 30th June 2024

Farmer Name	Acreage planted (No. of acres)	Location	Remarks
Mudhasi	2.5	Buwolya village, Buwolya parish, Mayuge district	All the seedlings had been planted
Mutaseka Badru	3.5		
Gwelu Muhamad	4		

Source: Field findings

The NOPP distributed various inputs to the project districts in the hubs of Buvuma and Mayuge**.** The inputs included: assorted fertilizers Rock phosphate (27,945kg), NPK (103,850kg), Urea (13,771kg), Kieserite (1,2220), MOP (44,243kg) and Dolomite (2,829 kg).

Challenges

i) Limited awareness about the recent NAADS interventions like provision of inputs at subsidized prices.
ii) Intermittent weather patterns.

Recommendations

i) The NAADS should closely work with DLGs to create awareness about the new farmer incentives
ii) Farmers should embrace irrigation farming to counter the effects of draught.

3.2.5 Access and use of water for agricultural production increased

Introduction

This intervention is jointly implemented by the Ministry of Water and Environment (MWE), MAAIF and DLGs. During FY 2023/24, the government prioritized increasing water for production storage capacity and utilization for agricultural commercialization through the construction of small, medium, and large-scale irrigation schemes.

The following key outputs were planned for implementation: (i) Water for production facilities designed, (ii) Existing facilities rehabilitated, (iii) Multipurpose surface water reservoirs (dams and valley tanks) constructed, (iv) Large scale irrigation schemes developed, (v) Medium scale irrigation schemes constructed, (vi) Small-scale solar-powered irrigation schemes constructed, and (vii) Sustainable Management Institutions for effective utilization of completed facilities established. The performance in delivery of these outputs is discussed below.

Performance

The performance of the Water for Production (WfP) interventions was fair. By 30th June 2024, the overall area under irrigation was 23,141 hectares (ha) while cumulative water storage capacity was 54.76 million cubic meters (Mcm). This was contributed to by the completed irrigation schemes and water storage reservoirs (valley tanks) respectively. The functionality of facilities stood at 88%, affected by theft, vandalism of scheme components, and inactive Water User Committees existing facilities. The delayed release of funds during the FY, and consequent late handover of construction sites to the contractors affected timely execution of works. The detailed performance of the planned outputs is subsequently presented.

(i) Water for production facilities designed

The design of multipurpose reservoirs was completed in the districts of Busia (Dabani), Kaliro (Namavundu), Buyende (Namuiki), Soroti (Lwala), Amuria (Ajenit), Hoima, Kagadi, Kiryandongo and Kyankwanzi; and medium scale irrigation schemes in Butebo (Akisim), Namisindwa (Lirima), Buyende (Ngole). A draft interim study report for the formulation of a national irrigation masterplan

was approved, but the assignment was halted due to delayed payment to the consultant. Review of the water for production manual was at 80% progress.

Detailed feasibility studies were ongoing for Amagoro irrigation scheme in Tororo district, a medium scale irrigation scheme in Pader district and six multipurpose reservoirs in Kitgum, Yumbe, Alebtong, Amuru (2) and Mubende districts. Designs for 139 small-scale solar-powered irrigation schemes were ongoing under the Development of Solar Powered Irrigation and Water Supply Systems project.

(ii) Existing facilities rehabilitated

Rehabilitation works were completed for two valley tanks in Arua (Biacci) and Kitgum (Lakongera); and two small scale irrigation schemes in Kalungu and Kalangala districts. This resulted in restoration of the water storage capacity for the completed valley tanks and improved operational capacity for the irrigation schemes. The rehabilitation works were lagging for the valley tanks in the following districts: Dokolo (Dima at 20%), Masaka (40%), Buvuma (20%), Mpigi (40%) and Kiboga (20%). Dima valley tank was vandalized by theft of solar panels, lighting, and fence cutting. Stakeholder engagements had commenced for the purpose of undertaking the rehabilitation works.

(iii)Large scale irrigation schemes developed

The planned targets during the FY were to: (i) Complete the development of six irrigation schemes namely, Doho II in Butaleja, Mobuku II in Kasese, Ngenge in Kween, Tochi in Oyam, and Wadelai in Packwach district. (ii) Commence construction of six (6) new ones: Amagoro in Tororo, Kabuyanda in Isingiro, Matanda in Kanungu, Namalu in Nakapiripirit, Sipi in Bulambuli and Unyama in Gulu district.

The irrigation schemes of Doho II, Mobuku II, Ngenge and Tochi were completed in previous years. The MWE continued to support the private schemes operators for these schemes in areas of operation, maintenance and management of the off-farm infrastructure. Technical backstopping and capacity enhancement was also offered to the farmers, post construction.

Overall, civil works progress for the Acomai Irrigation Scheme was at 75%. The project was behind schedule due to floods that affected works.

The Wadelai works stalled at 93% completion with structural failures (cracked scheme buildings and broken canals) as observed during monitoring. The contractor's inability to complete the works was attributed to the limited financial. A few farmers utilized sections of the scheme.

A section of a broken main canal of Wadelai Irrigation Scheme in Packwach district

The construction of new large-scale irrigation schemes was lagging, with Kabuyanda earth

dam works at 20% completion level, delayed by heavy rains. In addition, the late handover of the sites for the irrigation scheme networks affected the project timeline.
The new irrigation schemes Amagoro and Matanda were under design, with Matanda pending approval of the detailed design.

The Sipi, Namalu and Unyama schemes were at the final stages of procurement, with their Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) reports prepared. The bureaucratic procurement procedures and inadequate GoU counterpart funding for PAPs compensation affected timely implementation.

(iv) Medium scale irrigation schemes constructed

The progress of ongoing works on medium scale irrigation schemes varied as follows: Bududa (Namaitsu 50%), Kapchorwa (Cheptui 15%), Nakaseke (Kirema 85%), Luwero (Kawumu 90%). Examples of monitored schemes are presented below:

a. Namaitsu medium scale irrigation scheme

A distribution pipe laid for Namaitsu medium scale irrigation scheme in Bududa district

The construction works were at 50% progress as at 18th July 2024. The target area was 30 acres covering two (2) parishes (Bukimuma and Namaitsu), and seven (7) villages of Bududa district. The scheme targeted 27 beneficiary households of which two (2) were female headed. The installation of sprinkler irrigation technology was ongoing at the time of monitoring. The targeted crops were high yield vegetables for commercial purposes.

b. Kirema medium irrigation scheme

The first phase of the scheme was 100% completed at 41% financial progress. The scheme covered approximately 100 acres of land mainly serving a coffee plantation. The components included three two water sources, of which two (2) reservoir tanks are $10m^3$ each and another of $100m^3$. The energy package included 160 solar panels of 330watt peak (Wp) and 18 solar panels of 390Wp, a submersible pump. A pump control and guard room were constructed. One famer benefitted in the first phase.

$100m^3$ reservoir tank for Kirema medium irrigation scheme

c. Kawumu Presidential Demonstration Farm

The irrigation scheme was at 90% progress by the end of the FY. The system components included development of the source (borehole) and seven (7) acres for crop irrigation. Drip lines were installed on four acres and sprinklers on three acres. Other components were a reservoir tank of $120m^3$, 55 solar panels, a pump and booster station that were functional. The farm had coffee, vegetables, matooke, pineapples and animals, both domestic

consumption and commercial purposes. The farm started using the project at the beginning of July 2024. It employed 35 people with 10 women and 25 men. Several challenges including delayed payments impacted the contractor's cash flow; production and logistical delays for the supply of steel tank panels, and electromechanical equipment; and delay in availing land affected timely implementation.

L-R; The control house and solar panels; Cattle at Kawumu demonstration farm in Kawumu, Luwero

(v) Small-scale solar-powered irrigation schemes constructed

The MWE planned to construct small-scale solar-powered irrigation schemes[9] under the Development of Solar Powered Irrigation and Water Supply Systems project, implemented by Nexus Green. Other schemes were implemented under the water for production regional offices for demonstration purposes.

The construction works for Small Scale Irrigation (SSI) demonstration schemes were completed in Kalungu, Nakaseke, Abudama in Apac, Agule in Katawi, Kakiri in Wakiso, Rushenyi in Mbarara, and Rwanjare (awaiting commissioning) in Kamwenge. These contributed to increased irrigable area. Others ongoing were: Bunyangabu (95%), Mbarara (60%), Kanungu (75%), Kasanda (5%), Wakiso (5%), Aganga SSI (98%) in Apac, Zigoti (98%) in Mityana, Bulisa (92%) in Mubende, Lwemivubo (94%) in Mubende pending lazer spray tape laying, Nyabubare SSI (95%) in Mitooma and Kyungu (95%) in Mukono, Kaina (98%) in Bunyangabu, Pajukwi (98%) in Nebbi and Lagwedola (96%) in Omoro district.

Major delays were noticed under the development of solar-powered small-scale irrigation schemes project with a target to complete 252 small scale irrigation schemes across the country by 30th June 2024. A total of 113 schemes were under implementation; 36 were substantially completed and only five (5) sites were commissioned.

Noted was the delayed commissioning of completed sites which increased the contractors' maintenance costs. The progress of works was majorly affected by lack of project readiness at initiation, site failures and in some cases change of scope of work which caused variation in costs and scope. In addition, heavy rains affected the intake works. There was delayed implementation of software activities that paused a challenge in system maintenance.

[9] To note is that the Uganda National Irrigation Policy 2017, mandates MAAIF to undertake development of micro and small-scale irrigation schemes

A total of 14 small-scale solar-powered irrigation schemes were monitored. Details are presented in **Table 3.13**.

Table 3.13: Status of small scale solar powered schemes as at 30th June 2024

No.	Status and Remarks	Acreage
1	Aganga SSI in Apac district was at substantial completion (98% level of progress). All scheme components including the pumping station and associated installations, i.e. the pump, solar system; the reservoir tank, pumping main and spray tapes among others were installed. Noted was that the scheme was sited in an area prone to flooding during the rainy seasons.	12.0
2	Abudama SSI in Apac district, Akokoro sub county, Abudama parish was complete and functional. It was provided to a model farmer to irrigate three (3) acres and for animal watering.	3.0
3	Agule SSI in Katakwi district, Toroma sub county, Agule parish was 100% complete, functional, and commissioned with good quality works. The area served was 12.5 acres. Major components such as the intake works, pumping station, energy package, reservoir tank and the lazer spray tapes were installed. There were 47 beneficiary farmers of which 40% were male and 60% females.	12.5
4	Pajukwi SSI in Nebbi district, Pajukwi parish was at substantial completion (98%). The scheme was for a model farmer with three (3) acres of land for crop irrigation. All the scheme components were installed and awaiting commissioning. The quality of work was good. The farmer had planted watermelons at the time of monitoring.	3.0
5	Lagwedola SSI in Omoro district, Lagwedola parish was at 96% completion. The reservoir tank was installed, the pump house with associated installations was complete and laying of the transmission and distribution pipe network was done. There were delays to lay the lazer spray tapes which required clearance of the plots by the beneficiaries who claimed they were unable to do so due to lack of funds.	10.0
6	Zigoti SSI in Mityana district, Malangala sub county, Zigoti parish was at 98% completion. It will benefit a group of four people. The valley tank source was in existence in which a pump was installed. The control room, 54 solar panels, four ($10m^3$ each) tanks were 100% complete. Four out of the targeted six (6) acres had lazer spray tapes laid.	6.0
7	Buliisa SSI in Mubende district, Bagezza sub county, Nabikakala parish was at 92% progress. The sump was complete; reservoir tanks installed; the installed solar panels had short pillars requiring to be raised. The remaining works included connecting laser tapes and concrete works at the intake and wire mesh installation as sieve for silt trapping. The installed pump was nonfunctional due to a faulty meter.	12.5
8	Lwemivubo in Mubende district, Kasambya sub county, Nabingoola parish was 94% complete. It targeted three beneficiaries. The tanks and 18 solar panels were installed.	12.5
9	Nyabubare SSI Mitooma district, Rwoburungi sub county, Keerabwa parish was at 95% progress. Works progress was affected by rains which caused collapsing soils	10.0
10	Kyungu SSI Mukono district, Mukono central division, was at 95% completion level. The source, sump, control room, guardhouse, reservoir tank ($100m^3$) were complete; 48 solar panels laid, and pipe laying was at 75%. Soil testing awaited the agronomist.	12.0
11	Kakiri SSI in Wakiso district: The works were substantially completed. The land was offered by the church. Major works included the source protection, sump and control room construction. The four $10m^3$ reservoir tanks were installed and all pipe networks were laid. The scheme was ready for commissioning. However, the famers were not effectively using the scheme since the irrigated part of the banana plantation was not weeded.	12.5

No.	Status and Remarks	Acreage
12	Rushenyi SSIS in Mbarara district, Nyarubungo Sub County, Rushenyi parish was completed. The farmer contributed to the construction of a control room, while the MWE provided solar panels, a pump, a 10m^3 water reservoir, and laid the pipe network. The farmer connected the horse pipe to the hydrant, enabling him to irrigate his gardens, where he grew matooke and fodder for his cows. He constructed a wall around the solar panels for security. The farmer was thrilled to report that the project had increased his farm outputs. He was able to have produce even during the dry season when other farmers were not farming. This was a testament to the project's success in providing a reliable water source for irrigation, enhancing food security and livelihoods.	2.0
13	Rwanjare SSI scheme is located in Kinoni Parish, Kamwenge District. The site works were complete and only awaiting commissioning. The major works done included: installation of a submersible pump, construction of a control house and ecosan toilet; 18 solar panels (475 Wp); transmission line of 343m. There was vanilla, coffee and banana growing.	2.0
14	Kaina solar powered irrigation in Rwimi, Bunyangabu district: The development of Kaina solar powered irrigation was at 98% progress. The scheme was composed of 380m transmission line with a pipe network.. A storage reservoir of 60m^3 and a two (2) stance VIP latrine were constructed. It was pending a recommended change of the hydrant from Pvc to stainless steel. The beneficiaries were six (6) households, a mosque and a church	15.0
	Total Acreage	**125.0**

Source: Field Findings and MWE reports

L: Fodder growing; and R: A protection wall built around the solar panels for security purposes for a SSIS in Rushenyi Parish, Mbarara district

L: A protected well; R: A plot of watermelon and a reservoir tank for Pajukwi SSI in Nebbi district

(vi) Dams and valley tanks for livestock watering constructed

Under the MWE, the construction works for new Valley Tanks (VT) was completed in the districts of: Kibuku (Natoto), Bukedea (Kanyonga), Kumi (Amosingo), Nakasongola (two VTs), Luwero, Masindi, Gomba, Sembabule, creating a total water storage capacity of 90 million liters for livestock watering. The following were at various levels of progress: Mbarara (Kyenshama earth dam 98%), Isingiro (Kabuyanda earth dam 20%), Omoro (Onekogwok VT 50%), Amolatar (Oriyamai VT 60%), Pader VT 70%, Kyotera VT 80%, Kazo VT 80%, Kiruhura (Rushere VT in 65%), Isingiro VT 65%, Kalungu VT 40% and Kiryandongo VT 45%. Earth works (excavation) were ongoing in Omoro while for Amolator excavation of the valley tank was completed pending the other amenities like cattle troughs, fencing, and sanitation facility.

The cabinet directive that limits wetland activities including access to construction material like clay affected progress of works for the Kabuyanda earth dam. Other challenges included design reviews for foundation modification, and procurement administrative reviews. The construction works for valley tanks were undertaken using framework contracts and some using the ministry equipment which frequently broke down due to their old state. Details of dams and valley tanks monitored are presented below:

(a) Kyenshama earth dam located in Mbarara district

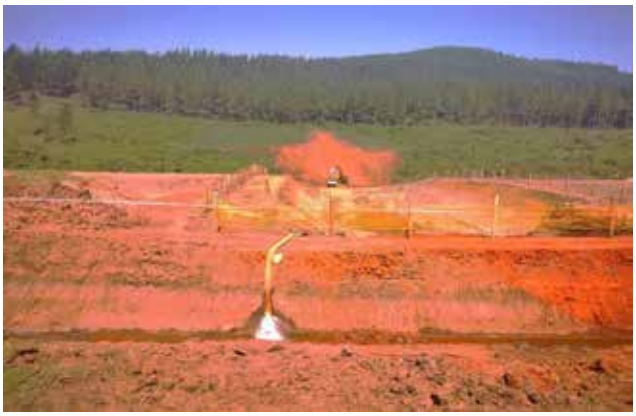
Kyenshama dam in Kabushwere parish, Nyabisirira Sub County was substantially completed at 98% progress level. The dam was awaiting handover, pending resolution of some snags including leakages. The water flows to the taps and cattle troughs, indicating a positive progress towards the project's goal of providing a reliable water source for livestock. A four-stance latrine for both male and female was constructed for each of the districts of Mbarara and Kiruhura.

Kyenshama dam

Reservoir Tank

(b) Kabuyanda earth dam in Isingiro district

The construction of Kabuyanda earth dam was at 20% progress against 51% project time. Earthworks were on going with upstream and downstream cofferdams created after the temporarily diverting River. Mishumba. The spillway, access road and slope protection works were almost complete. The dam is expected to create a storage capacity of 8.801Mm^3 of water reservoir with live volume of 7.289 $Mm^{3.}$ This will provide water for Irrigation of 3300 hectares command area.



The diverted Mishumbi River and core trench excavations at Kabuyanda dam in Isingiro

(c) Kyotera and Kazo water surface reserviors

The construction of the two water reservoirs, each with a capacity of 10,000,000 liters, in Kazo and Kyotera districts, was at 40% completion, with all excavation works complete. Each site featured solar-powered water management systems, supplied by two submissive pumps to two 10,000-liter tanks.

Kyotera Valley Tank in Kooza Paris, Kyotera district

In Kyotera, a nine-member Water Management Committee, comprising four women, oversaw the project, with women holding key positions as Vice Chairperson and Treasurer. While excavations were completed, civil works were yet to start due to procurement delays. Additional provisions included VIP latrines for sanitation and troughs for livestock in both locations.

(d) Onekogwok Valley Tank in Omoro district and Oriyamai Valley Tank Amolator district

These were under construction. In Omoro district, excavations were ongoing while for Amolator the excavation of the VT was complete, pending fencing, cattle troughs, and a sanitation facility.

L: Excavation works for Onekogwok Valley Tank in Omoro district; R: Completed excavation for Oriyamai Valley Tank in Amolator Town Council, Amolator district

(vi) Sustainable Management Institutions for effective utilization of WfP facilities established

In order to ensure sustainability of completed facilities, the Water for Production (WfP) department planned to offer support for newly completed facilities and for old ones having operational issues. By 30th June 2024, management structures such as Farmer Based Management Organisations (FBMOs), Water User Committees (WUCs) and Scheme Operators were established and trained. These structures were formed or under formation in the schemes visited such as Dima valley tank in Omoro district, Wadelai in Packwach and Namaitsu irrigation scheme in Bududa district.

However, the unwillingness of communities to pay the water user fees made the structures inactive. for example, the valley tank in Dima was vandalized due to lack of security guards who left due to non-payment of their salaries. In addition, the few and yet old fleet of vehicles, coupled with delayed release of quarterly funds affected the extensive support necessary for sustainable management of the WfP facilities.

Micro-scale irrigation program (UgIFT)

Under the Uganda Intergovernmental Fiscal Transfer (UgIFT) program, the Government of Uganda, with support from the World Bank, MAAIF (Ministry of Agriculture, Animal Industry and Fisheries), and local governments, is implementing a micro-scale irrigation initiative. This program aims to assist farmers in purchasing and utilizing individual irrigation systems, with the goal of enhancing agricultural productivity and improving the livelihoods of farmers across the country. The beneficiary farmers are required to co-fund the facility by contributing 25% of the total procurement and installation costs.

The programme performance was poor at 16.2% of the targeted farmer installations. A total of 158 irrigation sites were established and equipped with various irrigation systems against the targeted 972 installations in the monitored districts[10]. The systems included; gravity drag hose, drip, and sprinkler systems. **Table 3.14.** The performance of monitored farmers is presented in **Table 3.15.** All the systems were functional.

As of July 24th, 2024, the monitored districts had a total budget allocation of Ug shs 7,571,532,247, of which Ug shs 2,576,524,639 was utilized, reflecting a low budget absorption rate (34%). The poor performance was attributed to the high 25% co-financing that most farmers could not afford; delayed installation of irrigation systems especially in rural districts that deter other willing farmers from enrolling onto the program.

[10] Kabale, bugiri, gulu, butaleja,buvuma,nebbi,luuka,mubende,kamuli,lira

Table 3.14: UgIFT microscale irrigation program performance in the monitored districts

District	Funds available/ release (Ug shs bn)	Expenditure (Ug shs bn)	Targeted installations	No of installations achieved	Remark
Kabale	0.368	0.108	36	11	The late release of funds delayed the procurement process, leaving suppliers with limited time to complete the installation of the systems.
Mubende	0.897	0.350	89	58	The performance was fair
Bugiri	0.904	-	305	14	Fair performance of the grant; with 53% grant unspent. 12 farmers had made a co-funding contribution of Ug shs 1 million each and the second co-funding had not been made.
Gulu	0.311	0.104	17	0	Delayed payment of the co-funding from farmers.
Luuka	1.106	0.891	55	46	Good performance, however, 19.4% of the funds availed was not spent due to delayed completion of works by the contractor. Installations for nine farmers were ongoing.
Butaleja	0.599	0.299	32	12	Poor performance, 50% of the fund not spent.
Kamuli	3.711	1.555	191	63	There was a low response from farmers in fulfilling the required co-funding contribution
Nebbi	0.488	0.122	305	0	Delays in procuring and installing the irrigation systems occurred due to suppliers facing stock shortages for certain equipment
Buvuma	0.288	0.021	44	12	The farmers find the co fund fee high.
Lira	0.475	0.475	19	0	19 farmers had paid the full co-funding and installations were on going.
Total	7.571	2.576	**972**	**158**	**Poor performance at 16% achievement.**

Source: Field findings

Table 3.15: Sampled UgiFT farmer installations as at 30th June 2024

Name of beneficiary	Location (district, sub county)	Facility type	Functional/ under use (Yes/No)	Reason/remark
Mugweri Frank	Iganga District Bulamogi sub county Bulowoza parish Kasolongangali village	Drag hose	yes	The system was installed on a 4-acre piece of land to irrigate passion fruits. His yield productions improved by 35% compared to when there was an irrigation system. His key challenge was water leakages as result of nozzles that frequently cracked.
Reverend Lubowa Michael	Gomba District Kinoni Sub County, Koome Parish Kasaka village	Drip, sprinkler and drag hose irrigation systems	yes	Out of the 10 acres, the Land under irrigation is 1.5 acres. His enterprises are coffee, banana, and horticulture. He has realized more yields on the irrigated land compared to where there was no irrigation.
Sese Farm School	Rakai district Kalangala District, Kalanagala town council Kalangala B ward, Kizzi cell	Drag hose and sprinkler systems	yes	Used for pasture and horticulture. The sprinkler system was perceived to be inappropriate as it provided inadequate irrigation water for the farm. The drag hose though appropriate required frequent repairs as students damaged it while gardening. The overall key challenge was the high maintenance costs of the two systems.
Akera Jackeline	Oding village, Oding parish, Unyama sub-county in Gulu district.	sprinkler, drag hose, diesel, and solar pump	yes	She is a demonstration farmer on 0.5 acres of land and has Used the system to support her vegetable garden.

Source: Field findings

Implementation Challenges

i) Non-functional irrigation facilities due to incomplete installations and abandonment of sites by MAAIF contractors
ii) The delayed release of funds during the FY affected timely implementation and progress of works.
iii) Late handover of construction sites to the contractor (Nexus Green) due to land wrangles and in some cases the water source potential was not adequate to allow construction works.
iv) Inactive WUCs due to unwillingness to pay user fees and the voluntary nature of work.
v) Increased contractors' maintenance costs due to delayed commissioning of sites.
vi) High co-funding (25%) by beneficiary farmers under UgIFT that is hindering uptake of the intervention

Recommendations

i) The MAAIF should ensure that all established irrigational facilities are operationalised
ii) The MWE should work closely with the district local governments for improved and timely identification of feasible sites.

iii) The district local governments should closely monitor the operations of WUCs on completed schemes and where need be restructure management by selection of new membership.
iv) The MWE should strengthen software activities especially budget provision to train the local communities on the operation and maintenance of the irrigation schemes.
v) The MWE should expedite commissioning of completed sites.

3.2.6 Access and use of agricultural mechanization increased.

The Government aims to enhance agricultural production and productivity and commercialization by increasing farmers' access to agricultural mechanization services. During FY 2023/24, the GoU focused on implementing two sub interventions in this area: i) Expand and equip regional agricultural mechanization and services centres ii) Establish appropriate public and private financing options for agricultural mechanization.

Performance

i) Expand and equip regional agricultural mechanization and service centres.

The MAAIF through the *Improving Access and Use of Agric Equipment Through Use of Labour-Saving Technologies for Agricultural Mechanization (ALST) Project* continued construction and equipping of the national and regional mechanization centres in various parts of the country.

By 30th June 2024, good progress was made in the rehabilitation works, although most were behind schedule. **Table 3.16** provides the status of construction works. The substantially complete centres were partially operational due to inadequate staffing, especially the operators, mechanics and technicians.

Table 3.16: Performance of rehabilitation works of agricultural mechanization centres by 30th June 2024

Mechanization centre	Location (District)	% progress	Works executed, status
Agwata Zonal Agricultural Mechanization Centre	Dokolo	90	Materials for construction of internal and external drainage works, internal building services and electrical were supplied; mobilization of personnel and equipment done
Bunghokho Zonal Agricultural Mechanization Centre	Mbale	75	Construction of partition walls, wall fence, ramp, and general works; works interrupted by temporary Court Injunction
Kigumba Zonal Agricultural Mechanization Centre	Kigumba	50	Substructure constructed
Buwama Zonal Agricultural Mechanization Centre	Mpigi	90	Materials for construction of internal and external drainage works, internal building services and electrical were supplied; mobilization of personnel and equipment done
Namalere National Agricultural Mechanization Cente	Wakiso	95	Works on construction/rehabilitation of warehouses, shade houses, stores, gate and sanitation facilities, main buildings and parking/gardens were advanced.

Mechanization centre	Location (District)	% progress	Works executed, status
Sanga Zonal Agricultural Mechanization Centre	Kiruhura	40	Construction materials were delivered; substructure works were in progress
Namungalwe Zonal Agricultural Mechanization Centre	Iganga	0	Assessment of the site was conducted; designs development and procurements were ongoing
Nabuin Zonal Agricultural Mechanization Centre	Nabilatuk	0	Works had not commenced

Source: Field findings; MAAIF data 2024

ii) Establish appropriate public and private financing options for agricultural mechanization

a) Equipment and machinery suppliers, dealers and manufacturers accredited

Several suppliers were accredited under the NAADS, ACF and MAAIF to provide assorted equipment and machinery for farm expansion, agro-processing, and value addition. Tractors and implements were procured and distributed to farmer groups, faith-based organisations, and special interest groups through multi-year contractual arrangements. Heavy earth moving equipment were hired by farmers to establish valley dams, valley tanks, farm access roads, fishponds and for bush clearing and land opening.

Cumulative tractorisation and equipment acquisition

On a cumulative basis since 2015/16 up to February 2024, the MAAIF and NAADS provided 1,021 tractors to the farming community, worth Ug shs 146.810 billion through the three interventions **(Table 3.17).** There was a major variation in the cost of the tractors and accessories, with the price being almost double for the tractors purchased by MAAIF directly, compared to the ones procured by the NAADS Secretariat. The increasing unit cost of tractors and implements was noted to be a major constraint.

Table 3.17: Cumulative performance of tractorisation in Uganda by 15th February 2024

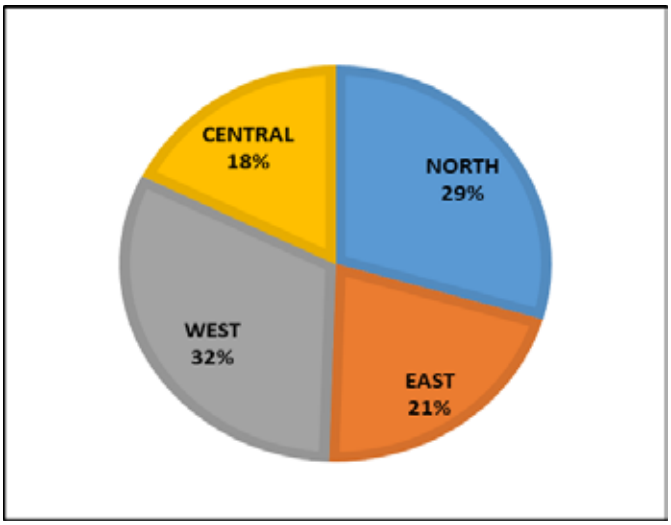
Institution/intervention	Total tractors and accessories procured	Budget spent (Ug shs)	Average cost per unit (Ug shs)
National Agricultural Advisory Services	407	30,997,468,203	76,160,855
MAAIF Agriculture Infrastructure, Mechanisation and Water for Production Department	471	64,000,000,000	135,881,104
Agricultural Credit Facility	143	51,812,800,178*	
Total	**1,021**	**146,810,268,381**	

***** *Figure was aggregated, including tractor purchase and capital costs of land expansion*

Source: Computed from MAAIF and NAADS Secretariat data

The tractors were distributed to farmer groups, cooperative Societies and Unions, schools, development projects, Government agencies, churches and district local governments. There was regional disparity in the distribution of tractors as exemplified by **Figure 3.3**.

Figure 3.3: Cumulative distribution of NAADS tractors by region by 15th February 2024

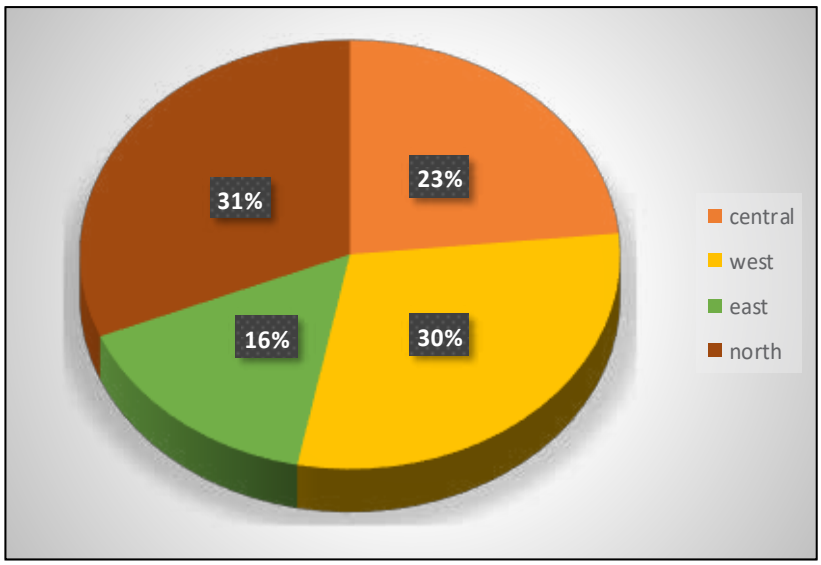


Access to tractor services by farmers was low and the some of the distributed equipment were not functional. Key challenges were: a) Poor maintenance and abandonment of some of the distributed tractors due to lack of management committees, funds and professional mechanics b) unaffordability and unavailability of spare parts in nearby localities c) some tractors had low horsepower and were not suitable for hilly areas.

Performance in FY 2023/24

Through the ALST Project, the MAAIF constructed/rehabilitated 109 valley tanks, dams and fishponds in the LGs with a total water storage capacity of 3,230,000m^3 (28.26%), below the planned capacity of 11,427,785 m^3. Regional analysis of access to the mechanization services indicated the Western and Northern regions had the highest access and the East the least access **(Figure 3.4)**.

Figure 3.4: Access to mechanization services by farmers by region as at 30th June 2024



Inadequate equipment, delayed payment of salaries and allowances especially of field staff and servicing of equipment and late provision of fuel affected progress of the interventions.

Under the Developing a Market Oriented and Environmentally Sustainable Beef Meat Industry project (MOBIP), excavation of valley tanks in Kiryandongo, Kiruhura and Isingiro districts were substantially completed. Operation and maintenance of mechanized irrigation demonstration schemes was at varying stages of establishment in Kalungu, Rakai, Kyenjojo, Bukomansimbi, Lyantonde, Masaka, Kampala, Rukungiri, Mbarara and Bukedea. Some irrigation systems that were established were non-functional due to incomplete installation, an exam. An example was the

installation at Kana Model Farm in Kyenjojo district that was not functional with some parts left in the bush by the implementer at the farm.

L-R: The Irrigation Demonstration was not operational due to incomplete installations; and the abandoned irrigation pipes at Kana Model Farm in Kyenjojo district

A gravitational flow irrigation scheme for rice research at the NARO Kamenyamiggo Satellite Station in Masaka district was 85% complete but behind schedule yet the financing under AVCP was phasing out by June 2025.

By 30th June 2024, Ug shs 68.50 bn was extended to 230 beneficiaries for acquisition of farm machinery and equipment under the Agricultural Credit Facility. Items that were procured by farmers included tractors, irrigation equipment, generators, feed mills, poultry and fish hatcheries, fruit juice extractors, coffee hulling and drying machinery among others.

3.2.7 Farmer organizations and cooperatives strengthened

Introduction

The intervention has two focus areas, namely: sensitizing farmers on the benefits of cooperating; and supporting up-coming farmer groups and cooperatives to effectively manage themselves. The planned outputs for FY 2023/24 included: a) Cooperative and entrepreneur skills inculcated to farmers and farmer groups and b) Farmer organizations registered and profiled. These outputs were fully monitored, and performance is presented below.

Performance

i) Cooperative and entrepreneur skills inculcated to farmers and farmer groups.

By 30th June 2024, the MAAIF through ACDP trained and strengthened a total of 28,357 farmer groups with a membership of 656,331 (44.6% female). An additional 4,069 new farmer groups were formed, and 7,039 farmer groups were linked to ACCEs/RPOs. Under the matching grants scheme, a total of 358 farmer organizations received matching grants worth Ug shs 110 billion of which government contribution was Ug shs 74 billion and farmer organization contribution was Ug shs 36 billion providing an additional storage capacity of 84,469MT.

Similarly, the project in collaboration with Uganda Cooperative Alliance (UCA) developed training manuals and guides, conducted trainings of trainers (ToTs) in all project districts. The training resulted in the establishment of district core teams that comprised of Extension Officers,

Community Development Officers and Community Based facilitators including the supervisory team at both MAAIF and District Local Governments.

Through MAAIF, the NOPP operationalized a total of 4 Oil Palm Organizations in 2 Hubs (Buvuma Oil Palm Growers Cooperative, Mayuge District Oil Palm Farmers' Cooperative, Bugiri district oil palm farmers' cooperative and Namayingo Oil Palm farmers' cooperative)

The MAAIF adopted a lead farmer approach to accelerate technology and input use diffusion to farmers at farmer group level. A total of 130 extension workers were supported to train 3000 Lead farmers in agricultural technology uptake in all the Crop Pest and Disease Control project districts. Additionally, 100 lead farmers and 20 Agricultural officers involved in African Armyworm (AAW) community forecasting and Early warning in Luwero, Iganga, Kasese, Pader, Masindi, Lira, Kiryandongo, Nakaseke. Kumi, Iganga and Kiruhura districts were supported.

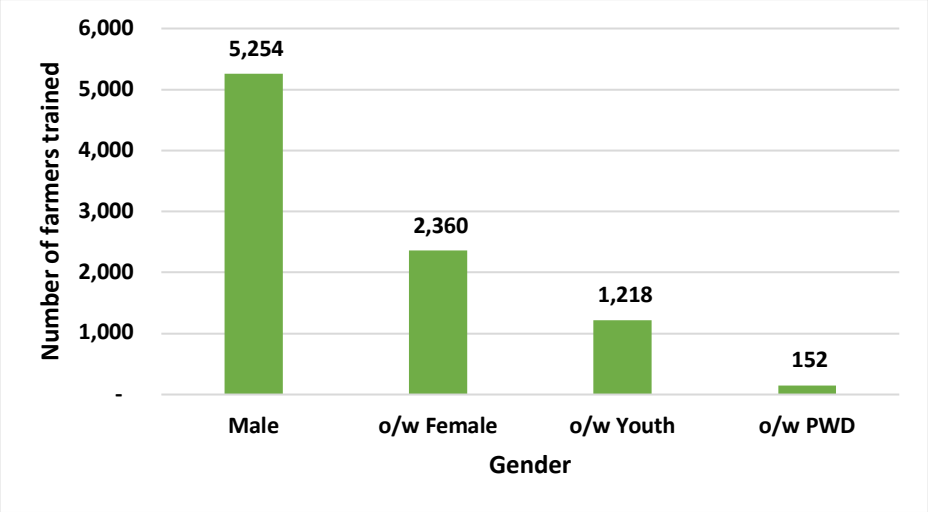
During FY2023/24, the UCDA supported benchmarking activity for leaders and farmers in Omoro District to Ankole Coffee Producers Coffee Union (ACPCU)-Sheema, Kibinge in Bukomansimbi and Kilema Heritage Farm in Nakaseke under the theme "Unlocking the potential of Omoro district through Coffee production". Seventy-two (72) stakeholders [58 Male, 14 Female & 5 Youth] participated; including Members of Parliament, Cultural leaders, Clergies, District and Sub County Leaders both technical and political, farmers' leaders.

Additionally, the UCDA carried out trainings on Organic coffee production systems for lead farmers and cooperatives in two regions. The training involved the following; 70 lead farmers from Abateganda Cooperative, Ntungamo (25M,05F,5Y, 8PWD) and West Nile Zombo Partners (M23, F17, Y12, PWD4). This was aimed to create awareness on organic farming practices and procedures/requirements for organic certification, and Internal Control System (ICS) procedures for increased organic coffee exports.

A total of 7,614 dairy farmers and farmer groups under Dairy Development Authority (DDA) were trained in good dairy farming practices such as Climate Smart dairy farming, local pasture improvement, fodder, water conservation, dry season feeding, breed improvement and value addition specifically yoghurt and cheese making targeting women, the stakeholders from different regions as follows; Southwest-2,564, Northern-1,193, Eastern-988, Northeast-1,165, Midwest-735, Central-969, and others at Entebbe Dairy training school and border posts.

The trained included those affected by HIV/AIDS and participation was gender complaint as shown in **Figure 3.5**. In addition, about 865 dairy stakeholders trained in value addition and Milk Quality Assurance at Entebbe Dairy Training School and at different regions.

Figure 3.5: Number of farmers and farmer groups trained in good dairy farming practices by gender by 30th June 2024.



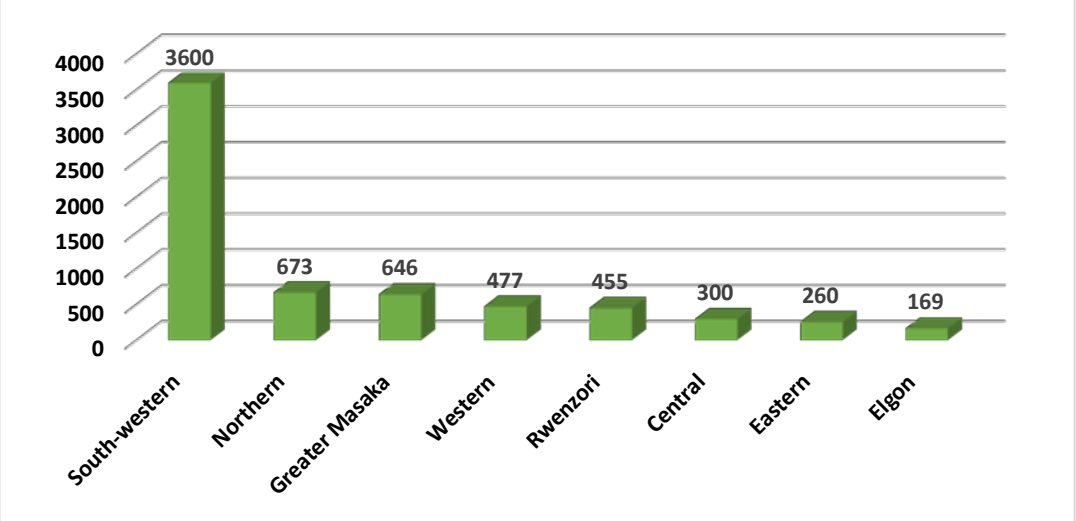
Source: Field findings

ii) Farmer organizations registered and profiled

Through AVCP, 856,428 farmers (52% female) were mobilized and registered in 35,516 farmer groups across the project area. The project also provided Business Development Services (BDS) to 450,000 maize and 205,000 rice farmers. By region, 562,100 farmers (54% female) in 23,068 farmer groups were registered and received project services in Central and Western Uganda while in the Northern and Eastern regions, 294,318 farmers (49% female) were represented in 12,448 farmer groups.

Using the geospatial monitoring and evaluation system, the UCDA digitally registered coffee farmer organizations, farmers, farms, Nurseries and Mother gardens, with progress being highest in the Southwestern region **(Figure 3.6).**

Figure 3.6: Coffee Farmers/ Farming organizations registered by 30th June 2024.



Source: Field findings; UCDA data

Challenges

i) Weak institutions because of limited time for group development, growth, and maturity
ii) Inability of leaders of farmer groups to participate fully in the registration exercise due to high illiteracy levels among leaders of farmer groups.

Recommendations

i) The MAAIF, UCDA and LGs should increase awareness and refresher courses on cooperating and entrepreneurship to the different stakeholders.
ii) Efforts should be made by the District Commercial Office to link mature groups to secondary cooperative within their sub counties or districts to enable them to bulk and sell together for increased bargaining power.

3.2.8 Systems for Management of Pests, Vectors and Diseases strengthened

Introduction

This intervention focuses on three areas namely: a) development and equipping of infrastructure and facilities for disease diagnosis and control; b) development of human capacity for management of pests, vectors, and diseases; and c) investment in agricultural drugs manufacture and distribution. Key activities included construction and equipping of animal holding grounds and quarantine stations and distribution of vaccines to control the spread of epidemics and ensuring that all established infrastructures are maintained.

Performance

a) Development and equipping of infrastructure and facilities for disease diagnosis and control

Infrastructure and facilities for disease diagnosis and control were developed and equipped. The main challenge was inadequate laboratory space, equipment, and furniture. Most laboratories lacked personnel and operated in congested spaces. Some laboratories were used as stores for other items like stationery, construction materials and foods, which increased risk of contamination of samples.

The MAAIF under the AVCP planned to construct four animal disease control centres in the districts of Nwoya, Kiruhura, Nakasongola and Mityana (Busunju). The scope of works included an office block, animal clinic, laboratory, vaccine storage facility, animal holding area and other amenities foe each disease control centre.

By 30th June 2024, the civil works at Got Apwoyo Zonal Animal Disease Control Centre located in Bar-lyec Parish Got Apwoyo sub county Nwoya district were completed. It was observed some of the defects on the completed structures were not rectified. The facility was being managed by NAGRC&DB. Although the facility was completed in FY2023/24, it remained non-functional as at 30th June, 2024, due to lack of the essential equipment and operational budget. Construction of other planned disease control centres had not commenced by 30th June, 2024. However, procurement of a contractor to undertake the civil works at Kiruhura zonal animal disease control centre was ongoing.

L-R: One of the laboratory rooms turned into a store for construction materials and non- functional spray race at Got Pwoyo zonal animal Disease control centre, in Nwoya district.

The laboratory at Mbarara ZARDI (Zonal Agricultural Research and Development Institute) was intended to serve all districts in southwestern Uganda by analyzing agricultural and animal health samples. However, it was under-equipped, operating at only 30% capacity. The laboratory lacked essential equipment, including a carbon dioxide incubator, refrigerated centrifuge, and an ELISA machine, which are very crucial for effective diagnosing animal diseases such as Foot-and-Mouth Disease (FMD). The laboratory was faced with; poor infrastructure, high humidity, slippery floors, and limited space that doubled as office space, further reducing its efficiency and safety.

Similarly, the Dairy Development Authority (DDA) laboratory at Mbarara regional office served 30 districts and 2 cities, working at only 50% capacity. The laboratory was mainly faced with; inadequate storage facilities, lacked essential microbiology equipment, poor protection from dust that greatly compromised the laboratory operation quality. Due to these significant limitations, samples from the region were to be sent to the National Dairy Laboratory in Lugogo for proper analysis, leading to delays in diagnostics and inefficiencies in service delivery across the region.

L-R; A small congested dairy laboratory at DDA regional offices in Mbarara and a laboratory at Mbarara ZARDI functioning as both a laboratory and an office.

b) Development of human capacity for management of pests, vector, and diseases

The Directorate of Crop Resources in MAAIF conducted field demonstrations to agricultural extension workers & farmers on control of Banana Bunchy Top Disease (BBTD) and Banana Rust Thrip in the districts of Nebbi, Arua, Moyo, Ibanda, Bunyangabo, Kyegegwa, Mbarara, Kasese, Bundibugyo, Kagadi, Zombo and Kazo. The MAAIF supported 100 lead farmers and 20 Agricultural officers involved in African Armyworm (AAW) community forecasting and early warning in Luwero, Iganga, Kasese, Pader, Masindi, Lira, Kiryandongo, Nakaseke. Kumi, Iganga and Kiruhura. The MAAIF also monitored plant clinics operations and also provided guidance to plant doctors in crop pests and disease diagnostics in the Karamoja sub-region.

For instance, Mubende District located in the cattle corridor, where farmers primarily engage in coffee and banana farming, was faced with numerous pest and disease related outbreaks. Coffee farmers were affected by the coffee red borer and red blister disease, which threaten crop yields and farm productivity. Similarly, livestock farmers were challenged with diseases that included; Foot-and-Mouth Disease (FMD), Lumpy Skin Disease (LSD), and Newcastle Disease. At the time of monitoring, the district was under quarantine due to an FMD outbreak, which severely affected livestock movement and trade at large.

c) Investment in agricultural drugs manufacture and distribution

The MAAIF, through the Livestock Disease Control Phase 2 (LDC-2P) project supported the procurement and distribution of livestock vaccines for state-controlled diseases. The targeted diseases included Foot and Mouth Disease (FMD), Contagious Bovine Pleuropneumonia (CBPP), Peste des petits ruminants (PPR), Anthrax and Black Quarter, Lumpy Skin disease (LSD) and rabies. The quantity of vaccines procured and distributed during the period is shown in **Table 3.18.**

Table 3.18: Vaccines and fridges distributed to DLGs by MAAIF by 30th June 2024

Vaccine/Cold chain	Target	Actual	Remark
Foot and Mouth Disease (Doses)	1,000,000	9,350,000	Increased due to the high disease prevalence. Distributed to high risk and hot spots cattle corridor districts and along international borders
Anthrax (Doses)	500,000	270,000	Distributed to all the affected districts in the cattle corridor
Brucellosis (Doses)	500,000	-	Not procured
PPR (Doses)	1,000,000	2,000,000	Distributed to all the affected districts in the cattle corridor
LSD (Doses)	1,000,000	1,000,000	Distributed to all the affected districts in the cattle corridor
CBPP (Doses)	500,000	-	Not procured
Rabies (Doses)	500,000	500,000	Distributed to all the affected districts in the cattle corridor
Scientific fridges (Number)	-	200	The fridges were distributed to all districts, cities, and municipalities to support cold chain management of vaccines FAO procured and facilitated districts in Karamoja

Source: Field findings

The monitored districts acknowledged receipt of the various vaccines. However, the level of usage of vaccines varied amongst districts with some completed while others still had vaccines stored. For example, the 10,000 FMD doses that were received by Kabale DLG, remained unused as the district had not yet enrolled in the Uganda Livestock Identification and Traceability System (ULITS). This was a pre-condition for permission from MAAIF to use the vaccines.

Overall, the vaccines covered 15% of the national herd yet the recommended vaccination coverage was at least 80% for effective control of animal diseases. About 85% of the susceptible animal population were left at the risk of contracting the diseases. The varying levels of vaccine usage were attributed to inadequate provision of consumables like injections and syringes, facilitation, and transport means.

The project also procured and distributed 200 vaccine fridges to all districts, cities and municipalities to support the vaccine cold chain. The fridges were reported to be high energy consuming for example in Nebbi, Lira, Nakasongola, Buvuma and Apac districts. Thus, were not in use and in some cases the refrigerators were too wide to go through the laboratory doors hence kept in the office corridors. These cases were identified DLGs of Nebbi, Buvuma and Kabale. A similar issue was observed at Mbarara ZARDI, where the refrigerator was kept in the office corridor.

L-R: Veterinary refrigerators kept in office corridors (Left) at Kabale DLG and (Right) at Mbarara ZARDI

3.2.9 Conclusion

The sub-programme had good performance rated at 84.9%. Notable achievements were the establishment and equipping of infrastructure for agricultural research, administration, and animal breeding. There was a net increase of 2,312 cattle in the sampled six farms of NAGRC&DB. There was poor performance in semen production, dissemination and use by farmers due to partial functionality of Nitrogen plants and the artificial insemination cold chains.

Good performance was realized in the generation and dissemination of new technologies to farmers. Innovative market-oriented products and engineering solutions for supporting agro-industrialisation and import substitution were under production. Substantial progress was made by MAAIF and MWE in provision of water for production and mechanization services to farmers. However, there were cases of non-functional facilities due to incomplete installations and abandonment of sites by contractors.

The staffing of agricultural extension workers was low with 3,790 filled positions (43.6%) compared to the approved norms. Inputs were distributed to farmers and value chain development was achieved for some strategic commodities and no others. The MFPED, MoPS, MAAIF and LGs

should prioritize recruitment and equipping more extension workers. The MAAIF and other agencies should further strengthen and support extension services and farmer group cohesion.

3.3 Storage, Agro-Processing and Value Addition Sub-Programme

3.3.1 Introduction

The sub-programme aims to improve post-harvest handling and storage and increase agro-processing and value addition in Uganda. The annual monitoring focused on two out of the seven NDPIII interventions: establish post-harvest handling, storage and processing infrastructure including silos, dryers, warehouses, and cold rooms of various scale; and establish new and rehabilitate existing agro-processing industries.

Performance

The overall sub-programme performance was good at 71% as at 30th June, 2024 **(Annex 3).** The sub-programme outcome performance was very good at 96.1% whereas the output performance was fair at 57.4%. There was improvement in postharvest management and handling, with postharvest losses reduced to 16.4% against the targeted 18% and storage infrastructure capacity increased to 1,267,768 MT against the targeted 1,350,000 MT. Output performance was mainly constrained by delayed initiation of procurements; non-functionality of established value addition and storage infrastructure. **Detailed output performance is provided in sections below.**

3.3.2 Establish post-harvest handling, storage and processing infrastructure

Introduction

The intervention aims at improving post-harvest handling and enhance storage of agro produce including value addition to facilitate marketing of agricultural exports. The planned outputs for FY2023/24 included: postharvest handling, storage and processing; support to agro-processing and value addition; milk postharvest and value addition and education and skills development. The outputs are largely implemented by MAAIF (ACDP), NAADS and DDA. Performance of the intervention is provided in detail here below;

Postharvest handling, storage and processing infrastructure established;70 storage facilities constructed, install 58 value addition equipment procured and installed and connect 93 non-operational value-addition facilities connected to electricity.

As of 30th June 2024, 52 storage facilities were completed while 18 were at various completion levels. Cumulatively, the ACDP supported 358 grantees under the matching grant arrangement with government (project) contributing Ug shs 74bn whereas the farmer organizations contributed Ug shs 36.5bn.

Majority of the grantees were dealing in maize whereas beans had the least number of beneficiaries. Out of the 358 grantees who received funding support, 67 were supported to construct only stores, while 291 were supported to construct storage and value addition facilities and acquire value addition equipment. To date, 340 farmer organizations completed11 construction with a total

[11] The eighteen facilities were at various completion levels.

storage capacity of 82,514 metric tons. When all finalized the supported grantees (358 ACCEs) would have a storage capacity of 84,469MT. (**Table 3.19)**.

Table 3.19: The distribution of the ACDP supported storage facilities by commodity as at 30th June 2024

Commodity	No. Storage facilities	Anticipated storage capacity (MT)	Completed construction	Storage Capacity (MT) of the completed infrastructure
Cassava	53	8,778	48	7,854
Beans	39	8,360	39	8,360
Maize	113	31,498	109	30,698
Rice	49	9,910	49	9,910
Coffee	104	26,323	99	25,703
Total	**358**	**84,869**	**340**	**82,514**

Source: ACDP Project Management Unit and field findings

Of the 291 farmer organizations supported to build storage facilities and install value-added machinery, 199 were operational (60 using generators and 139 using electricity) while 92 were not operational. The non-functionality of completed structures was mostly due to lack of three phase power; missing equipment components, partial delivery of processing equipment; inadequate volumes (off-season) among others.

Support to agro-processing and value addition

The NAADS planned to procure and install one milk processing unit in western Uganda and one oil processing unit in northern Uganda. The NAADS delivered and installed 19 maize milling equipment for the 19 farmer organizations. In addition, the NAADS procured a mini dairy and oil processing unit which was yet to be delivered. However, three of the delivered and installed maize mills units were not operational at the time of monitoring.

The NAADS also delivered and installed 22 milk coolers and matching implements with a total storage capacity of 65,000 litres for 22 beneficiary farmers in 17 districts[12]. The key challenges were inadequate releases and late initiation of procurements that affected execution of the planned activities.

Milk Postharvest handling and value addition.

The planned outputs included: Milk Collection Centres at Wera, Bugiri, Bukedia and Mbale rehabilitated; Twelve (12) coolers and matching generators procured and installed for Milk Collection Centres in Bukedea, Wera, Bugiri and Kakooge among others; and One (01) Tricycles for Dairy Cooperatives in Northeastern Uganda procured and handed over.

The DDA procured and distributed 11 milk coolers and matching generators to 11 farmer groups in 9 districts[13]. Rehabilitation of milk collection centres at Mbale, Bukedia, Wera and Bugiri did not

[12] Kiruhura, Nakaseke, Gomba, Kakumiro, Mubende, Ibanda, Kazo, Kamwenge, Kyankwanzi, Kayunga, Lyantonde, Kiboga, Masindi, Nakasongola, Kamuli, Isingiro and Ntungamo.
[13] Kamwenge, Kyankwazi, Mukono, Kabale, Tororo, Apac, Ngoma, Kazo, Isingiro, and Amuria.

happen though contracts were awarded. The non-achievement of planned outputs was due to the late release of development funds and delayed initiation of procurements.

Education and skills development
The DDA trained 865 participants from 73 special interest groups in dairy value addition (yoghurt, ghee and cheese processing). The MAAIF participated in two agriculture shows; harvest money expo organized by the new vision and the Jinja agriculture show organized by National farmer federation.

The MAAIF in collaboration with NARO and International Institute of Tropical Agriculture (IITA) established 20 field efficacy trials on the use of Aflasafe in production of maize, ground nuts and sorghum. A total of 400 extension agents were trained in harvesting, post-harvest handling, primary processing, storage and safety technologies for cocoa, tea, maize, groundnuts and beans value chains. The trainings were conducted in collaboration and support from Solidard, Swiss Contact and Food and Agriculture Organisation (FAO).

3.3.3 Establish new and rehabilitate existing agro-processing industries

The intervention aims at increasing agro-processing and value addition in Uganda. The intervention is mainly implemented by MTIC (UDC), MoLG, DDA and MAAIF. The planned outputs for the FY2023/24 were industrial and economic development (support to UDC). The monitoring focused on UDC projects and performance is given below.

Industrial and economic development; support to the Uganda Development Corporation (UDC)
The UDC was re-established under the Uganda Development Corporation Act, 2016 as the investment and development arm of the GoU. Its primary objective is to promote and facilitate industrial and economic development in Uganda. This is to be achieved through: i) establishment of subsidiary and associated companies, ii) enter into Public Private Partnerships (PPPs) with other enterprises, and iii) promotion and facilitation of research into industrial development.

Performance
The UDC budget for FY2023/24 was Ug shs 59.216bn of which Ug shs104.848 bn (177% of the budget) was released by 30th June, 2024. The over 100% release performance was due to a supplementary release to the entity worth Ug shs 46.467bn of which Ugshs 41.911 bn was for construction of the Speke Resort Convention Centre and Ug shs 4.556 bn for Soroti Fruit Factory. However, the total cash available to UDC was Ug shs 262.609 bn (inclusive of GoU releases, balance brought forward from FY2022/23 and other revenues).

By 30th June 2024, Ug shs 135.885 bn of the total cash available to UDC was for Agro-Industrialisation related investments[14] (exclusive of funds for UDC wage, non-wage and feasibility studies) of which Ug shs 97.644 bn (71.8%) was spent. The expenditure was by three companies[15] of which 91.7% was invested in HIHC-Atiak sugar factory for procurement of mechanized cane

[14]Soroti fruits limited; Cocoa processing factory; Luwero fruit factory; HIHCAtiak sugar factory; Potato processing factory; Kaaro koffi limited; Yumbe fruit factory; Acholi bur cassava processing plant; Busoga sugar cane transporters grant; and Busoga sugar factory.
[15] HIHC Atiak sugar factory; Soroti fruits limited and Yumbe fruit factory.

production equipment. However, it was reported in June, 2024 that Atiak sugar factory was not producing sugar since July 2023 due to lack of cane.

The physical performance of the monitored agro-processing UDC investments is given below.

Soroti Fruit Factory

The Soroti Fruit Factory (SOFTE) is a Government intervention aimed at supporting value addition in fruit processing for the promotion of industrial growth, income diversification and increasing household incomes in the Teso sub-region. In 2012, the Government of Korea through its development arm; the Korean International Cooperation Agency (KOICA) provided a turnkey project worth US$ 7.4 million for the construction of Soroti Fruit Factory with the GoU responsible for provision of complementary services and works.

The planned outputs for FY2023/24 were processing plant maintained and working capital provided; procurement and installation of a packaging line for polyethylene terephthalate (PET) bottles and construction of an effluent treatment plant.

Performance

The procurement and installation of an automated PET packaging line was completed and was in use. The new PET bottle filling line had an average output of 1,125ltrs/hr of ready to drink juice (RTD). The SOFTE procured and processed 1,105MT of fresh fruits (oranges and mangos) against a planned target of 1455MT, that yielded 105MT of concentrate and puree. The target for orange fruits was achieved whereas for mangoes only 22% was achieved. The factory generated Ug shs 1.50 bn revenue from the sale of products like orange concentrate; mango pulp and ready to drink (RTD) juice. The sales of RTD juices constituted 86.1% of the total sales revenues; thus, the need to improve processing infrastructure to leverage the market opportunity for RTD juices.

It was observed that the factory was operating at a loss with the cost of sales for the factory at Ug shs 1.156bn whereas finance and administration costs, operating expenses and distribution costs totaled to Ug shs 5.637bn.

The procurement of a contractor for the effluent treatment plant establishment failed at financial proposal evaluations with the best evaluated bidder quoting Ug shs 1.1bn against the availed resource of Ugx 0.70bn. The Chimaki Agro Ltd was hired to operate and manage the factory and is expected to actualize the memoranda of understanding at the beginning of quarter two FY2024/25.

The factory cited challenges of inadequate working capital and low demand for orange concentrate. The establishment of SOFTE was to add value to the locally produced fruits (oranges) in the region however the sales trends indicate mango products to have more demand than orange products thus the need to rethink the strategy by either marketing orange products vigorously within and outside Uganda or to shift the focus to mangoes and ensure availability of the raw material. There is also need for UDC to fully capitalize the entity and streamline its operations for the factory to break even.

Budadiri Arabica Coffee Factory Limited

Budadiri Arabica Coffee Factory Limited (BACML) is located in the Sironko district and specializes in purchasing, grading, and sorting coffee beans for export. The factory has an installed processing capacity of 12,000MT of coffee beans per year. The UDC invested Ug shs 8.12bn to own equity into the company in FY2022/23. The funds were used partly to settle the loan obligation

with Uganda Development Bank limited (UDBL) (Ug shs 4.37 bn) that had led to closure of the facility and also to provide working capital.

In October 2023 Ug shs 1.050bn was released to the company as working capital whereas Ug shs 2.0 bn was deposited on the company account. The company recruited two permanent staff and purchased coffee (parchment and green beans) worth Ug shs 3.5bn. The revenue generated by the company was Ug shs 3.6bn. The factory reported a net loss of Ug shs 0.047bn. The company's gross profit margin was 2.8%, which is below average for food processing industries of 35%. The factory reported challenges of inadequate working capital amidst stiff competition from big players in the coffee value chain.

Yumbe Fruit Factory (Nilezilla Ltd)

Nilezilla is a fruit processing factory located in Lodonga sub-county, Yumbe district with an installed processing capacity of 6MT of fresh mangos per hour. The company is jointly owned by the Food and Nutrition Solutions Limited (FONUS), UDC and Alinga Fruit Farmers' Cooperative Society (AFFCS). However, the proportionate stake of each was yet to be determined.

During the period under review the UDC invested Ug shs 6.117bn out of the availed Ug shs 8.283bn to operationalize the factory of which Ug shs 1.031bn was spent by 30th June 2024. The expenditure was on procurement of furniture; electrical and mechanical tools; laboratory equipment; double cabin pickup and factory consumables and payment of staff salaries.

Mutuma Commercial Agencies Limited (MCAL)

The company adds value to raw cotton to produce products like surgical cotton wool, vegetable oil and cotton seed cake and is located in Luuka town council. The UDC invested Ug shs 4.5bn in the FY2022/23 and total ordinary shareholding was at 36% (45000 shares) as at 30th June 2024.

During the FY2023/24 the MCAL bought seed cotton from farmers worth Ug shs 1.485 bn. Ug shs 3.502bn was generated as revenue of from the sale of cotton husk, cotton lint, cotton waste, cotton cake, soap stock and cotton wool. The sales revenue increased by 23.6% in comparison to FY2022/23. The company acquired key assets for better production efficiency that included: a steam boiler (1000lts/hr); diesel generator (250kv) and a dying machine (six bales/batch).

Even though the company reported a net loss of Ug shs 1.153bn, there was a 17.2% reduction in losses in comparison to FY2022/23 thus representing a positive growth. The average gross profit margin for the period under review was 1.9%, which is below the recommended industrial average of 35%. The company reported challenges of power outages, outstanding loan obligations with UDBL, and low throughput machinery.

The UDC availed Ug shs 28.187bn to seven projects where no expenditure happened, and no output achieved. These included: Cocoa processing factory in Bundibugyo, Luwero fruit factory, Patato processing factory, Kaaro koffi ltd, Acholi Bur cassava processing factory, Busoga cane transporters and Busoga sugar factory. The reasons for non-achievement of planned investment outputs was attributed to encumbrances on the proposed project sites (e.g Luwero fruit factory and Acholi Bur cassava processing factory) and delayed completion of pre-investment studies.

3.3.4 Conclusion

The overall sub-programme performance was good at 71%. The outcome performance was better than output performance mainly because of the contributions from the private sector towards this sub programme. In relation to outputs, most of the established value addition and agro-processing facilities were either non-functional or operating at suboptimal capacity. This was attributed to the delayed release of development funds for DDA and NAADS; delayed completion of valuation and feasibility studies and due diligence and appraisal of investment projects by UDC; lack of appropriate electricity to power the established value addition facilities. These constraints are not insurmountable.

Recommendations

i) The UDC should expedite pre-investment studies and processes to ensure that projects that have been in the pipeline for over three years are implemented or dropped.
ii) The MAAIF and MEMD should develop mechanisms for electrification of the established value addition and agro-processing facilities especially under the ACDP.
iii) The MAAIF and NAADS should ensure procurements are initiated timely to avoid rollover of activities to the subsequent FY.

3.4 Agricultural Market Access and Competitiveness sub-programme

3.4.1 Introduction

The GoU aims to increase market access and competitiveness of agricultural products in domestic and international markets through three NDPIII interventions. The interventions are to: a) strengthen enforcement and adherence to product quality requirements including food safety, social and environmental standards and grades; b) improve agricultural market infrastructure in rural and urban areas and; strengthen capacities of public institutions in analysis, negotiation and c) development of international market opportunities particularly for the selected commodities.

The Key implementing agencies for the sub-programme included: Uganda National Bureau of Standards (UNBS); Ministry of Agriculture, Animal Industry and Fisheries (MAAIF); Uganda Coffee Development Authority (UCDA); Dairy Development Authority (DDA); Ministry of Local Government (MoLG); and district local governments. The performance of the monitored interventions is given below:

Performance

The overall sub-programme performance was good at 87.4% achievement of the planned outputs and intermediate outcomes targets **(Annex 4)**. The sub-programme output performance was good at 80.6% whereas the intermediate outcome performance was very good at 100%. The intervention aimed at improving agricultural market infrastructure in rural and urban areas had the highest output performance at 90%, compared to the other monitored interventions.

However, some of the established market infrastructures were not functional. Performance at output level is provided in **Table 3.20**. The outcome of increased agricultural exports had the highest performance whereas the outcome of the value of agricultural imports had the least performance.

Table 3.20: Sub-programme performance by intervention as at 30th June, 2024

Intervention	Output performance (%)	Remarks
Strengthen enforcement and adherence to product quality requirements	82.6	Good performance
Agricultural market infrastructure in rural and urban areas improved	90	Very good performance
Capacities of public institutions in analysis, negotiation and development of international market opportunities strengthened	74.2	Good performance

Source: Author compilation

3.4.2 Strengthen enforcement and adherence to product quality requirements

The planned and monitored outputs included; certification permits for products and firms issued; quality, standards and accreditation; and marketing and value addition. The physical performance of the monitored outputs under the intervention is given below;

Certification permits for products and firms issued.
The DDA inspected a total of 3,754 milk handling premises involving equipment, processing plants, freezers/retail outlets, road tankers/transporters, MCCs/coolers, import and export consignment for compliance with quality standards. The DDA conducted 52 and 31 enforcement and surveillance operations respectively to ensure compliance to standards and regulations. During the above operations, a total of 5,509 milk and dairy product samples were collected and analyzed at regional laboratories and National Dairy Laboratory at Lugogo.

In addition, the Uganda National Bureau of Standards (UNBS) certified 4,951 products and 34 management systems.

Quality, standards, and accreditation
The UCDA inspected and certified 6,126,397 bags (60kgs) of coffee for export worth US$1.14bn. The quantity and value of coffee exported during FY2023/24 increased by 6.3% and 34.7%, respectively in comparison to FY2022/23. However, the quantity exported was below the targeted 7.5 million bags by 18.3% and this was attributed to the incidents of pests especially the black coffee twig borer, among others.

Additionally, the UCDA inspected 3,413 entities involved in the coffee value chain that included 1,931 factories, 1,421 stores, 34 roasteries and 27 grinding units. A total of 155 green coffee bean samples were analyzed for presence of ochratoxin A and 97.9% of the samples were negative. The UCDA conducted 10 enforcement and surveillance motions in six coffee growing regions; six stakeholder sensitizations; and four radio talk shows.

In order to promote agro-input standards, the MAAIF department of crop inspection and certification developed and rolled out the digital Seed Traceability and Tracking system (STTS) to help improve the seed certification process. A total of 174 seed company representatives, seed dealers and stockiest were trained on the use of this system. The department also trained a total of 400 agricultural extensionists in post-harvest handling.

Marketing and value addition

i) Farmers and manufacturers trained on sanitary and phyto-sanitary standards
The AVCP procured and installed High-performance liquid chromatography (HPLC) equipment at the sanitary laboratory in Namalere. The project was in the process of acquiring the necessary consumables for full deployment and testing of pesticides both from imported consignments and market enforcement activities. Additionally, the MAAIF inspected 98 veterinary establishments for compliance with biosecurity and sanitary standards; and conducted nine countrywide surveys and collected 400 samples to monitor the presence of chemical and drug residues.

The ACDP supported a total of 570 ACCEs/RPOs through training and provision of business development services. A total of 85 ACCEs were trained by UNBS and supported in acquiring a Q-mark; of which 44 acquired tax identification numbers, 33 developed and registered the product name with URSB which are prerequisites for attainment of Q-mark. However, only four of the trained ACCEs received the Q-mark during the period under review.
The UCDA trained a total of 236 quality controllers in sanitary, safety and quality standards in the districts of Mubende, Mityana, Luwero, Bushenyi, Kamuli, Mbale and Kasese. A total of 30 staff from coffee exporting companies were also trained in ISO 17025 standard implementation and maintenance.

ii) Certification laboratory facilities renovated, built, and equipped
The construction works for the National Metrology Laboratory at UNBS headquarters Wakiso district funded by AVCP was completed in December 2023 and equipping of the facility was at 50% by 30th June. The laboratory was partially functional with some of the staff that were previously housed at Uganda Industrial Research Institute Nakawa now occupying the facility. The remaining batch of laboratory equipment under AVCP financing was expected to be delivered and installed in Q1 FY2024/25.

The AVCP also supported the DDA to procure and install Ultra-High-Performance Liquid Chromatography (UHPLC) and CHARM II equipment in the FY2022/23 to aid the accreditation process of the Analytical Laboratory at Lugogo. The equipment was fully operational and functional at the time of monitoring, and 5,509 milk and dairy product samples were analysed. The technical staff were trained in quality management systems, method validation and measurement uncertainty.

The laboratory received recognition from the UNBS. Furthermore, AVCP supported DDA to expand the programme of improving food safety and quality management systems among dairy farmers. The DDA published and disseminated various regulations for dairy marketing and processing, food safety and quality management system and proficiency testing. The accreditation of the laboratory under ISO 17025:2017 certification was not achieved.

The renovation of National Semen Laboratory at NAGRC was at 65% physical progress. Delayed works was due to heavy rains during season2024A.The rehabilitation of the National Phyto-sanitary Laboratories at Namalere also under the AVCP project funding was ongoing at 70% physical progress. The scope of works includes: construction of permanent store for agro-chemicals and renovation of plant health laboratory, administration block agro-chemicals laboratory. The project procured assorted Laboratory equipment which were fully installed and operational, 500 samples of suspected diseased plants were tested from the facility. It was observed that the contract for the civil works under AVCP had expired on 31st July 2024.

The rehabilitation and construction of the National Seed Laboratory structure at Kawanda was at 90% physical progress. The roofing and installation of the fittings had been completed, while electrical and plumbing were partially done. The site was abandoned as the ACDP project that was funding the works had closed. The contract time overruns for the civil works was attributed to weak contract management and inadequate financial capacity of the contractor.

The ACDP also equipped the fertilizer analytical laboratory at Namalere with Analytical equipment, glass wares, laboratory consumables and personal protective equipment. All equipment were assembled and fully functioning. The laboratory can test between 100-150 samples daily on parameters such as hydrogen potential (pH), total nutrients, organic carbon, moisture and heavy metals concentration.

3.4.3 Agricultural market infrastructure in rural and urban areas improved

The intervention aims at improving access to farms and to markets for inputs and produce respectively. The output is implemented by the MAAIF under the ACDP, NOPP and NOSP projects;, NAADS and DLGs.

Farm and community access roads and road chokes constructed.
In regard to rehabilitation of road chokes on community farm access roads under ACDP, the overall physical progress was at 78% as at 30th June 2024. In Phase 1, works in the 6 districts of; (Kalungu, Amuru, Nebbi, Pakwach, Iganga and Bugweri) were completed except in Ntungamo works was at 75% physical progress.

Abandoned incomplete ACDP bridge/road choke in Kamahuri village Nungamo district that disconnected community members from markets, schools and health facilities in neighboring villages.

In Phase 2, overall works progressed at 71% and completed in 5 districts (Kyotera, Masaka, Kakumiro, Rakai and Bushenyi). Phase 3, the overall physical progress achieved was 85% of which works in the 17 districts[16] were practically complete. Road works/chokes/bridges in the districts of Kiryandongo, Oyam, Masindi, Ntungamo and Yumbe districts were incomplete and the intended road chokes were not worked on to enable access to markets and movement of agricultural inputs.

Construction of 1000 km of community access roads with funding from the National oil seeds project in the 81 DLGs did not happen. However, the ministry of Local government initiated the procurement process for the firms to undertake the construction of the above roads and the process was at bid evaluation stage.

[16] Kole, Oyam, Dokolo, Lira, Butebo, Pallisa, Apac, Kwania, Serere, Soroti, Kasanda, Mubende, Bunyanagabu, Kabarole, Kamwenge, Kitagwenda and Kasese

Access roads and farm roads opened up in partnership with the National Oil Palm Project (NOPP)

During the FY2023/24 the NOPP surveyed, designed and demarcated 13km and 40km of community access roads (CARs) and farm access roads (FARs) respectively in the Buvuma hub. Cumulatively a total of 63km and 100km of CARs and FARs respectively have been surveyed, designed and demarcated in Buvuma hub. A total of 89 km of CARs and FARs were surveyed, designed and demarcated in Mayuge hub.

A total of 3.2km of FARs were constructed in Buvuma hub bringing the number to 32 km cumulatively. In addition, the OPBL has cumulatively opened 561.42 km of access roads in and around the nucleus estate in Buvuma hub. These ease access to fresh fruit bunch (FFB) harvests and movement from the gardens to the processing mill.

It was observed that construction of roads in Buvuma was behind schedule at 24.2%. This was attributed to delays in compensation of the project affected persons, surveying and mapping of land for oil palm growing and environment restoration.

Farm access roads rehabilitated under Labour Saving Project

The MAAIF through Labour Saving Project, rehabilitated/constructed 350km of farm access roads to ease access to farms and markets for transportation of agricultural inputs and produce respectively among others.

Markets infrastructures established

The construction of markets infrastructure under the MAAIF and various monitored DLGs performed fairly. Detailed performance and status of the markets visited is provided in **Table 3.21**. Construction of market facilities by the NAADs under the Agriled programme were initiated in FY2022/23. However, some activities were implemented in FY2023/24.

Table 3.21: Status of monitored markets implemented under NAADS, MOBIP and DLGs as at 30th June 2024

Implementer	Market	Status	Cost (Ug shs)	Remark
	Two (2) Rural Agricultural Markets (Kasangali - Kajolly market and Ezron Mbethe - Kinyamaseke main Market) constructed in Kasese	Works were in progress at 75% in Kasangali and 65% in Kinyamaseka main market	1.185 billion	Works ongoing
	Rwaihamba market constructed in Kabarole district	Works commenced but stalled at 10% progress.	1.163 billion	The contractor was not on site.
	Busunga Town council border market constructed in Bundibugyo	Works were at 75% physical progress.	2.690 billion	Works ongoing
	Construction of Roadside market at Nyakigumba TC	Physical performance was at 65%	306.357 million	Works ongoing

Implementer	Market	Status	Cost (Ug shs)	Remark
Agri-led by NAADS.	Bunyangabu district carried out			
	Construction of Kamwenge Central Market Phase 1 in Kamwenge undertaken	Works commenced and were at 85% physical progress.	1.263 billion	Works ongoing
Luuka DLG	Construction of Three Roadside markets at Ikumbya, Kyanvuma and Bukanga	The overall physical progress was estimated at 80% with roofing done. The pending work was final finishes.	0.038bn	Works ongoing
	Completion of Nabyoto Livestock market	The facility was completed and handed over to Bukoova TC leadership for management.	0.001 bn	Completed but not yet operationalized.
Amuru DLG	Construction of a slaughter slab at Atiak TC	100%		The facility was completed; however, it lacked access roads and safe water supply.
MAAIF	Renovation of the Sanga meat stalls. Sanga slaughter facility	100%		The facility was completed and handed over to the user. The slaughter facility was substantially complete, compound paving was at 50% and not yet commissioned.

Source: Field findings

3.4.4 Capacities of public institutions in analysis, negotiation and development of international market opportunities strengthened

The intervention contributes to the objective of increasing market access and competitiveness of agricultural products in domestic and international markets. It also involves Uganda's bilateral engagements/diplomatic missions to promote Ugandan products abroad. The participating institutions include; MAAIF, UCDA, DDA and Missions abroad. The planned outputs for the FY2023/24 included: coffee marketing; coffee value addition service; support to value chain stakeholders among others. Performance of the monitored outputs is given below.

Coffee marketed.
The UCDA participated in seven strategic exhibitions that included: The Specialty Coffee Expo in Chicago, Illinois; The World of Coffee Expo Asia- Busan South Korea; The World of coffee Expo-Copenhagen Denmark and the Coffee show in Istanbul Turkey, among others. Uganda coffee promotion was done in eight missions of China, Canada, Doha, Turkey, Nairobi, Kuala Lumpur, and U.S.A. The UCDA also participated in 41 local exhibitions to promote domestic coffee consumption and value addition. A total of 190,800 cups of coffee were brewed and information on coffee trade, investment opportunities in the sector, coffee types, grades, and benefits of taking coffee was explained to the attendees.

Coffee value addition services promoted.
The UCDA trained 25 coffee roasters (18 males and 7 females) and 132 brewers (78 males and 54 females) in basic barista skills. A total of 99 roasters and brewers were inspected in Central, Elgon, Eastern and Southwestern coffee regions of Uganda.

Value chain stakeholders supported.
The UCDA trained 419 farmers from ten cooperatives in the districts Iganga, Kanungu, Masaka, Kyotera, Ntungamo, Omoro, and Zombo. A total of 69 specialty and fine coffees were marketed on the websites of the coffee quality institute (CQI) and Agency for the Valorization of Agricultural Products (AVPA).

The NAADS participated in one National exhibition on the Agricultural show in Jinja and 3 regional agricultural exhibitions in Mubende, Greater Luwero and Masaka City. Over 5000 farmers were reached and sensitized on NAADS Interventions. Similarity participated in the 16th African Dairy Conference and exhibition 2023. The event provided a platform to create awareness about NAADS' Interventions in the dairy sector to 1,000 delegates and 100 international and local exhibitors.

The DDA also participated and facilitated 12 dairy farmer exhibitions and trade shows across the country. The shows involved exhibitions to farmers' latest dairy technologies and products; dairy testing equipment; sensitizations and dissemination of dairy standards and regulations.

3.4.5 Conclusion

The performance of the sub-programme was good at 87.4% attainment of both the annual output and intermediate outcome targets. Interventions related to establishment of market infrastructure in both urban and rural areas performed better. However, the functionality of some of the established infrastructure was yet to be realized. Monitoring and compliance to sanitary and phyto-sanitary standards remains weak thus affecting the competitiveness of Uganda agricultural products on both international and domestic markets. There is a need to strengthen the enforcement and compliance with standards for better results. The key sub-programme implementation challenges were delayed completion and functionality of the market of infrastructure, increased number of counterfeit agricultural products and inadequate budgetary releases.

Recommendations

i) The NAADS should hand over the completed market infrastructure to the intended beneficiaries for operation and maintenance.
ii) The MAAIF and UNBS should strengthen quality controls and certification of agro-produce with the aim of meeting international market standards

3.5 Agricultural Financing sub-programme

3.5.1 Introduction

The Government aims to increase the mobilization, equitable access, and utilization of agricultural finance for farmers, agro-processing firms and farmer groups. Key interventions focus on development of concessional long-term financing instruments through the following institutions: (Agricultural Credit Facility (ACF)), Uganda Development Bank (UDB), Microfinance Support Centre Limited, Agricultural Insurance Scheme and Uganda Development Corporation (UDC). During the annual monitoring exercise focus was put on ACF, UDC and Agricultural Insurance. The findings are presented below.

Performance

By 30th June 2024, the sub-programme output performance was fair at 65.6%. Detailed performance is discussed below.

3.5.2 Develop concessional long-term financing for agricultural infrastructure and capital investments

Agricultural Credit Facility

The ACF is a risk sharing public-private partnership that has provided medium and long-term financing since 2009 to farmers to undertake agricultural projects, agro-processing, and grain trade at subsidized interest rates. The ACF leverages resources of Participating Financial Institutions (PFIs) to bridge the financing gap, interest chargeable being 12% per annum with exception of working capital for grain trade that is chargeable at 15% per annum. In order to promote inclusivity and equity to borrowers, block allocations of Ug shs 20 million are provided to micro-borrowers who often lack collateral in form of personal real estate.

Cumulative performance

Since FY 2009/10, 7,726 loan applications worth Ug shs 1.58 trillion were submitted to the Bank of Uganda (BoU) of which 4,442 applications (57%) worth Ug shs 981 bn were disbursed by 30th June 2024. Of the disbursed loans, 2,767 (62%) were to small holder farmers under the block allocation, worth Ug shs 18.599 bn.

Performance in FY 2023/24

The funds availed for lending amounted to Ug shs 80.697bn including a GoU contribution of Ug shs 31 bn and repayments from PFIs worth Ug shs 49.697 bn. The PFIs disbursed Ug shs 59.342 billion to 485 farmers/firms, with a government contribution of Ug shs 28.241 billion.

The number of borrowers increased by 49.7% in FY 2023/24 in comparison to the previous FY2022/23; however, the value decreased by 51.7%. The block allocation modality emerged as a pivotal strategy in facilitating access to finance for micro and smallholder farmers. A total of 254 loan facilities were given out under the block allocation representing 51.6% of the loan facilities. However, the total value of the block allocation was low Ug shs 1.449 billion (2.4% of the total value of loans).

Equity analysis in access to the ACF showed persistent regional disparities in the distribution of loans among farmers, with the Central region receiving the highest percentage share of the loan amount (63%) and Northern region with the least share (4%) **(Table 3.22).** The communal land tenure system in Northern Uganda constrained access to ACF due to the absence of land

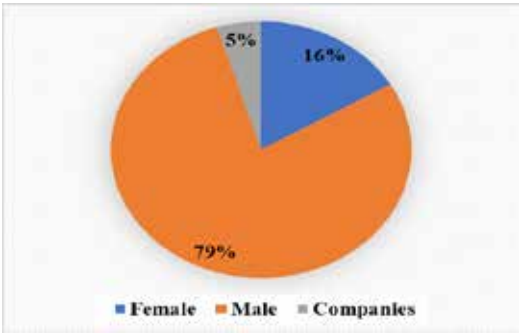
titles/collateral. Furthermore, insufficient financial literacy among farmers, coupled with a lack of collateral and information gaps regarding ACF in branches of the Participating Financial Institutions (PFIs), hindered credit access in Eastern and Northern Uganda.

Table 3.22: Regional distribution of ACF as at 30th June, 2024

Region	No of loan facilities	Loan amount (Ug shs)	% share of the loans	% share of the loan amount
Central	230	37,150,477,244	47	63
Northern	25	2,605,500,000	5	4
Eastern	17	3,853,000,000	4	6
Western	213	15,733,491,869	44	27
Total	**485**	**59,342,469,113**	**100**	**100**

Source: Author's analysis of ACF data

Figure 3.7: Access to ACF loans by gender as at 30th June 2024



Source: Author's analysis of BoU data

Gender analysis revealed that the male had a high number of disbursed loans compared to the female counterparts **(Figure 3.7)** despite the implementation of block allocation. This trend was attributed to men's more widespread access to collateral and availability of working capital, enabling them to support capital investments more readily than women. A total of 23 loans were to companies representing 5% of the total loans.

Value addition and post-harvest handling attracted most funding in FY 2023/24 while working capital had the least share **(Table 3.23)**. In comparison to FY 2022/23, the percentage share of loan value to value addition and postharvest management was lower at 18.7%.

Table 3.23: Share value of loans aggregated by purpose by 30th June 2024

Purpose	No of loans	Loan value (Ug shs)	% share of the loan value
On-farm activities and equipment	395	24,016,689,033	40
Working capital	48	2,767,200,000	5
value addition	13	24,891,110,080	42
Grain trade	29	7,667,500,000	13
Total	**485**	**59,342,499,113**	**100**

Source: ACF Database

All the ACF projects monitored received less funds than requested, mostly due to inadequate collateral; this constraint affected the viability of the projects. Nevertheless, the loan beneficiaries were able to overcome cash flow challenges and establish projects. The time taken to process and access ACF loans by farmers reduced from 4 months in FY 2022/23 to one month on average in FY

2023/24 following the introduction of the Agricultural Credit System at Bank of Uganda that quickened online appraisal of loan applications and disbursements. A few cases of farmers with longer loan processing time of close to four months persisted.

Good performance in terms of increased production, mechanization and value addition was realized in the projects that were financed by ACF. For example, Ntake Bakery and Oil Refinery in Namanve Industrial Park used the Ug shs 10 bn ACF loan for procuring silos and machinery. A total of 2,000 tonnes (33.33%) of crude palm oil out of the planned 6,000 tonnes and 60 tonnes of kennel oil out of the 1,000 tonnes were processed. The key challenges were the high price of imported raw materials from Malaysia and utilities and high impurities in locally sourced oils at 20%, above the recommended 5%.

L-R: Oil refinery machinery was functional and the crude palm oil that was produced at Ntake Bakery and Oil Refinery in Kampala district.

Table 3.24 summarizes the progress and key issues affecting ACF implementation among the monitored borrowers. All the borrowers appreciated the loan facility, although those engaged in industrial production requested for the interest rate to be reviewed downwards to allow them to meet the high cost of taxes and utilities.

Table 3.24: Performance of the ACF loans as 16th August 2024

Name	District	Amount requested (Ug shs)	Amount received (Ug shs)	Purpose	Remarks
Mr. Andrew Kawuki	Nateete, Kampala	500 million	500 million	Grain trade	Loan was processed within one month. Procured 510MT of maize grain. Key challenge was the low price for maize grain at Ug shs 950/kg.
Mr. Henry Sekabembe	Wakiso	100 million	60 million	On-farm activities (purchase of farm inputs)	Collateral was insufficient although the beneficiary noted that his property was undervalued. Hence some planned activities were not implemented. Key challenge was the long loan processing time of three months. He used the money to procure fertilisers, herbicides and expand the coffee garden to 26 acres
Johnson	Wakiso	300 million	250	Maize	Procured 300 MT of maize grain, constructed a warehouse and administrative office. Due to less

Name	District	Amount requested (Ug shs)	Amount received (Ug shs)	Purpose	Remarks
Mutaruha			million	processing	funds received However, he had to use cheap material for warehouse construction to bridge the shortage in the funds received.
Ntake Bakery and Oil Refinery Limited	Kampala	10 billion	10 billion	Value addition and equipment financing	He appreciates the facility and was able to construct four silos of 2500MT capacity each and procured 2000 MT of palm kernel. The cost of oil raw materials (palm kernel) was high and likely not sustainable thus need to grow the raw materials locally through provision of land by government to establish a nucleus estate for oil palm.
John Geofrey Mbabazi	Mukono	210 million	210 million	On-farm activities (poultry)	Procured 11,000 chicks but lost 6,200 chicks due to diseases. More awareness creation by the PFIs about the product is required.
Hajji Ismail Lyazi	Lukaya	250 million	250 million	On-farm activities (poultry)	Procured 15000 birds in first lot of which 7,000 died due to disease; the quality of chicks was also poor. Procured an additional 20,000 chicks and 100 tonnes of feeds. Project was progressing well, selling on average 300 trays of eggs per day. However, there was no grace period granted.
Jeka Poultry Farm	Kamuli	800 million	800 million	On-farm activities (poultry)	Constructed a semi-automated rearing house and procured 30,000 birds bringing the total birds' population to 100,000. Disease outbreaks negatively affected the profitability of the investment.
Agro-ways (U) Limited	Jinja city	2 billion	2 billion	Grain trade	The company procured sorghum and maize for supply to Nile Breweries Limited and to Burundi.
The EDGE Trading Limited	Kampala	5 billion	3 billion	Coffee machinery	The company acquired coffee processing machines and 3,000 tonnes (43%) of coffee parchment, below the planned 7,000 tonnes as funds were insufficient. This loan was disbursed in FY 2022/23

Source: Field findings

L-R: Grain procured with ACF loan awaiting sale at Mr. Kawuki's warehouse in Kampala district and poultry cage farming was performing well at Hajji Ismail's farm in Kalungu district

Key challenges

i) Low access to ACF by small holder farmers due to: a) limited awareness and financial literacy b) lack of collateral iii) lack of proximal PFIs offering ACF c) information gaps at the PFI branches regarding ACF as they do not get briefing from their headquarters
ii) Inability of smallholder farmers in savings and credit cooperative societies to access the ACF as the tier 4 institutions are not accredited to participate in the scheme
iii) Under valuation of the collateral, thus limiting the loan value that can be accessed by borrowers.

Recommendations

i) The BoU and PFIs should continue publicizing the ACF especially in Northern and Eastern Uganda and among the underserved groups
ii) The BOU and MFPED to consider the tier 4 institutions such as SACCOs to be accredited to extend ACF to small holder farmers.
iii) The DLGs should utilize the available guidelines to ensure uptake of these wealth creation programmes.

3.5.3 Finalize and implement the Agricultural Finance and insurance Policy

Introduction

The Uganda Agriculture Insurance Scheme (UAIS) started as a pilot scheme in Fiscal Year 2016/17, through a Public- Private Partnership (PPP) between the Government of Uganda and private sector insurance players. It aimed to mitigate financial losses suffered by farmers as a result of damage and destruction of crops and livestock due to adverse climate, pests and diseases, fires and other related disasters. Uganda Insurers Association is the private partner implementer of the scheme through the Agro Insurance Consortium (AIC), a coalition of 13 insurance companies licensed to underwrite agriculture insurance in Uganda. The scheme provides insurance premium subsidies to farmers at the following rates: 50% for small-scale farmers; 30% for large-scale farmers and 80% for disaster-prone areas regardless of the scale.

Performance

During the FY 2023/24, the AIC received Ug shs 5.0 bn as GoU investment which was all spent by 30th June, 2024. Agriculture Insurance was embraced in all regions of Uganda with a total of 37,114 farmers enrolled with value of insured enterprises at Ug shs 202.552 billion **(Table 3.25).** There was a decrease in the number of subscribers from 298,488 in FY2022/23 to 37,114 during FY2023/24, this was partly attributed to the inadequate budgetary allocations for the scheme. The western region had the highest number of farmers enrolled whereas the eastern region had the lowest number enrolled.

Table 3.25: Summary of performance of access to Agriculture Insurance Scheme by 30th June, 2024

Region	Number of farmers	% farms insured	Sum Insured	Basic Premium	Subsidy Amount
Western	13366	36.01	85,528,532,934	3,334,603,677	1,861,058,146
Northern	10620	28.61	27,794,737,100	1,936,404,132	1,451,389,152
Eastern	4333	11.67	17,894,771,549	1,037,587,961	746,433,390
Central	8795	23.70	71,333,967,457	1,979,790,228	994,679,857
Total	37114		202,552,009,040	8,288,385,998	5,053,560,545

Source: author's analysis of AIC data

During the review period, 37,114 farmers subscribed to the scheme, and it was observed that the majority of the farmers (35,265) got the government subsidy while the 1,849 farmers were unable to access it due to the depletion of the subsidy. The farmers that applied for insurance were small-scale farmers and large-scale farmers in highly risky and prone areas (received 80%) and the small-scale farmers (received 50%). The bulk of the subsidy was extended to farmers involved in crop and mixed farming which were most prone to climatic/weather adversities while machinery and aquaculture were the least insured **(Table 3.26).**

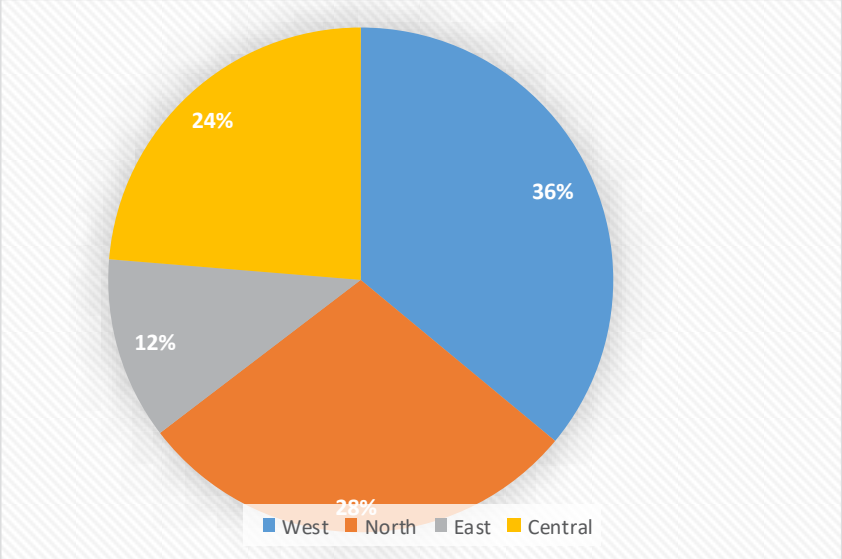
Table 3.26: Access by farmers to the Agriculture Insurance subsidy by 30th June, 2024.

Enterprise	No. of farmers insured	Amount received (Ug shs)
Crop farming	21,065	1,423,532,050
Aquaculture	34	3,215,450
Mixed farming	12,183	1,332,391,623
Poultry and livestock	1,839	463,432,440
Machinery	11	891,450
Others	133	21,809,035
Total	**35,265**	**3,245,272,048**

Source: author's analysis of AIC data

In the period under review, the western and northern regions had the highest number farmers enrolled for the scheme **(Figure 3.7)**. The uptake of the scheme was lowest in the eastern region. This distribution highlights the necessity for effective subsidy management to ensure equitable support for farmers across different scales and geographic regions.

Figure 3.7: Percentage share in farmers' access to insurance subsidy by region by 30th June 2024



Source: Author's analysis of AIC data

Agro-Processing Factories financed through acquisition of shares by Uganda Development Corporation

The Uganda Development Corporation (UDC) planned to invest and support 10 Agro-Industrialisation projects as shown in Table 3.27. The total cash availed for the 10 projects was Ug shs 135.885 bn of which Ug shs 97.644 bn was spent by 30th June 2024. The low expenditure or investment was attributed to delayed completion of the appraisal studies.

The biggest part of the expenditure (91.7%) was for HIHC - Atiak Sugar Factory. Two of the financed investments, HIHC and Yumbe fruit factory, were not processing intended raw materials as they were not readily available. The monitoring covered two investments of Yumbe fruit factory and Soroti Fruit Factory. The performance of the investments was poor with none of the monitored entities reporting a profit.

Table 3.27: Planned Agro-Industrialisation investment projects by UDC as at 30th June 2024

Project/Investment	Cash availed (Ug shs)	Amount invested (Ug shs)
Soroti Fruits Limited	9,437,039,759	1,932,648,883
Cocoa Processing Factory	1,645,251,100	-
Luwero Fruit Factory	5,498,576,084	-
HIHC - Atiak Sugar Factory	89,978,953,018	89,594,115,282

Project/Investment	Cash availed (Ug shs)	Amount invested (Ug shs)
Potato Processing Factory	1,000,000,000	-
Kaaro Koffi Ltd	1,500,000,000	-
Yumbe Fruit Factory	8,283,461,500	6,116,750,000
Acholi Bur Cassava Processing Plant	13,500,000,000	-
Busoga Sugar Cane Transportation (Atiak) Grant	170,230,000	-
Busoga Sugar Factory	4,873,525,650	-

Source: UDC data; field findings

Conclusion

The overall performance of the sub-programme was fair at 65.6%. The sub-programme performed better in regard to increasing the mobilization of agriculture finance, especially under the ACF and UDC, however, the expenditure was low. The ACF beneficiaries that were monitored were able to procure farm inputs, acquire machinery and expand their enterprises, among others.

The introduction of the Agricultural Credit System at Bank of Uganda shortened the loan processing time for some beneficiaries. However, under agriculture insurance, the number of farmers that subscribed to the scheme reduced compared to FY 2022/2023 and this was because of the depletion of the government subsidy which required the farmers to pay full premiums. Implementation of planned under UDC was poor as most of the planned investments were not undertaken due to delayed completion of the appraisal studies.

Challenges

i) Lack of collateral especially by small scale farmers like women and PWDs limits their access to agricultural loans.
ii) Insufficient financial literacy among farmers. Many farmers are not aware of government subsidized programs.
iii) Depletion of government subsidy which affects agriculture insurance enrolment.
iv) Delayed completion of project appraisal studies by the UDC.

Recommendations

i) The MFPED and BOU should consider revising premium subsidy structures based on a thorough assessment of the financial needs and capabilities of farmers. This could increase uptake and participation in the insurance scheme.
ii) The BoU should strengthen affirmative action for the disadvantaged regions and gender to enhance access to agriculture financing; create more awareness to ensure absorption of the funds of the availed funds.
iii) The UDC should expedite the process of appraising investments and ensure proper planning for the funded projects.

3.6 Institutional Strengthening and Coordination sub-programme

3.6.1 Introduction

The Government aims to strengthen institutional coordination for improved service delivery. The sub-programme is composed of two sub-interventions, namely, strengthen coordination of public institutions in design and implementation of policies including access to quality food and food security and; strengthen linkages between public and private sector in agro-industry. The annual monitoring exercise focused on one sub-intervention - strengthen coordination of public institutions in design and implementation of policies including access to food and food security.

The planned outputs were: i) Public-private dialogue guidelines developed (PDM implemented); ii) administrative infrastructure established iii) Regular collection and dissemination of agriculture data undertaken; iv) Nucleus farmer model across all ecological zones supported and developed; v) Partnerships and collaboration with other relevant stakeholders promoted e.g., women groups. The annual monitoring focused on all outputs as discussed hereafter:

Performance
The performance of the Institutional Strengthening and Coordination sub-programme was fair at 59% performance **(Annex 6)**. The coordination of public institutions was strengthened through development and implementation of laws, regulations, guidelines, and procedures. Government administrative infrastructure was expanded to enhance access to public services in the LGs.

3.6.2 Strengthen coordination of public institutions in design and implementation of policies

Good performance was realized for the Institutional Strengthening and Coordination Sub programme during FY 2023/24. All the programme entities collected agricultural data to aid decision making. There was a gradual shift from manual data collection to digital systems. Several strategic partnerships and collaborations were established to enhance agricultural production, storage, value addition and marketing.

i) Public-private dialogue guidelines developed (PDM implemented)
Significant achievements were made in update of laws, regulations, guidelines and procedures for crop, livestock and fisheries inspection, production, handling and management. The PDM operational guidelines were developed by MAAIF and key stakeholders and disseminated in the LGs. They guided the dialogue between the public and private sector players especially at the district, parish and Savings Credit Cooperative Organizations and formation of farmer enterprise groups.

The Plant Protection and Health Act 2015, Seeds and Plants Act 2006, Plant Variety Protection Act 2014 were reviewed. Procedures for certification of vegetative planting materials and Draft National Coffee Regulations were developed; and the Veterinary Practitioners and Animal Feeds Bills were gazetted.

The Cotton Training Manual for extension workers and the Farmers' Cotton Production Guide were reviewed and updated. Emphasis was put on climate change mitigation practices and environment protection measures. Farmers were sensitized on availability of cotton planting seed. Farmers'

meetings and radio talk shows took place to prepare farmers for cotton planting. The finalisation and approval of the Agricultural Extension Bill stalled since 2020, awaiting final decisions on how NAADS is supposed to operate in future. The development of an Integrated Management Information System (MIS) for Livestock Service was on-going.

Implementation of the PDM strengthened the lower local government institutions especially at the parish and village level. All monitored beneficiaries had received the Ug shs 1 million, although there were cases of corrupt tendencies where part of the funds were reclaimed by the implementing officers within the local governments and instances of diversion of funds. On average, 70% of the funds were used effectively by beneficiaries on planned enterprises in the agriculture sector. The beneficiaries changed plans and spent about 20% on other agricultural enterprises.

About 10% of funds was diverted to other needs such as marrying additional wives, trade, purchase of phones and other household items, setting up businesses like shops, boda, hair dressing saloons, restaurants and eateries or paying school fees, and meeting food and health expenses.

For example, Ms Annette Tebayitwa in Kyenjojo Town Council boosted her small restaurant at Kyenjojo district Headquarters using PDM funds. She expanded her business by acquiring cooking utensils and upgraded from selling beans to chicken to her customers. The clients doubled with the increased capital injection.

Open air restaurant established at Kyenjojo District Headquarters using PDM funds.

Cases of diversion of PDM funds were cited in Kimengo and Bwejanga subcounties were parish leaders collected between Ug shs 30,000 and Ug shs 200,000 from beneficiaries after disbursements. In Kayembe subcounty in Mubende district, it was common for some PDM beneficiaries to re-allocate to other districts so that they would not be reached to refund the money. Funds diversion as noted in Kagango Ward and Kyabukuju Ward in Ntungamo district where the beneficiaries used the money to pay off loans.

Extension workers were actively engaged in forming and training PDM enterprise groups and individual beneficiaries, focusing on improving agricultural practices and conducting comprehensive enterprise profitability analysis (*Ekibaro*). The Wendi Mobile Wallet was introduced and subsequently rolled out across the districts. This reduced the costs and risks associated with accessing traditional banking services. This digital financial platform enabled beneficiaries to access their funds more efficiently and securely through their mobile devices.
Key challenges were a) Diversion of funds from the planned enterprises; b) weak research-extension-farmer linkages, evident in low access by farmers to improved technologies, good quality seeds, breeds and fertilizers and inadequate extension services; c) Limited access to the Parish-Based Management Information System (PDMIS) and monitoring funds by district production officers that posed a significant barrier to the effective supervision of the PDM beneficiaries.

ii) Administrative infrastructure established.

Administrative infrastructure and regional offices were established by MAAIF and agencies as well as Local Governments to improve stakeholders' access to services in proximal distance. Some institutions such as Uganda Coffee Development Authority (UCDA) hired office space in the regions while others such as Dairy Development Authority (DDA) maintained the offices that they had constructed in earlier periods.

Administrative office was under construction at Kyenjojo DLG

The multi-year construction of a new and enhanced production office block, including space for laboratory services was progressing at 60% completion at the Kyenjojo District Local Government, using the agricultural extension grant and non-tax revenue.

Five regional offices were established by the Agro-Consortium Limited in Mbale, Fortportal, Mbarara, Gulu and Lira that improved farmers access to the Agricultural Insurance Scheme. Outreach to dairy farmers improved with the establishment/strengthening of six regional offices in Kampala (central), Jinja (Eastern), Soroti (Northeastern), Gulu (Northern), Kiboga (Mid-Western) and Mbarara (South Western). Access by farmers to the National Oil Seeds Project (NOSP) improved with the establishment of six administrative hubs in West Nile (Arua), Northern (Gulu), Mid-Western (Hoima), Mid Northern (Lira), Eastern (Mbale) and Karamoja.

iii) Regular collection and dissemination of agriculture data undertaken.

The Ministries, Agencies, Departments and Local Governments (MDALGs) undertook routine collection of agricultural data, although information dissemination was limited due to inadequate manpower, skills and resources. Most administrative data was stored in manually and not analysed, hence not easily usable for policy decisions. There was also duplication of effort as ministries and development partners requested for agricultural information in different formats. All LG departments collected data mostly for upward accountability to access resources. There were no feedback loops on the data submitted to MDAs.

There were some nascent efforts to digitalise information generation and use in some institutions and departments within the agro-industrialisation programme. For example, the processing time for ACF loan applications was reduced with the introduction of the Agricultural Credit System at Bank of Uganda. Relatedly the data on PDM beneficiaries was managed through the Parish-Based Management Information System (PDMIS).

The NAADS Secretariat carried out GIS mapping and assessment of functionality of agro-machinery and value addition equipment supplied since 2014 in Mukono, Masaka and Mubende districts. These included tractors, solar water irrigation, maize mills, feed mills, milk coolers, milk and fruit processing equipment. The MAAIF was collecting extension related data using the E-dairy that was rolled out in 70 districts.

The UCDA rolled out the Geo-Spatial Monitoring and Evaluation System and coffee farmer registration app where 3270 farmers were successfully registered on the app from Western region

(1251), Greater Masaka (1405) and Central region (614). The system was not fully appreciated by farmers, some of whom refused to be registered. The system was resource intensive as registering each farmer required movement on all the corners of each farm. One survey to estimate the production levels in 31 coffee growing districts was conducted. Total estimated coffee production was 2,642,262-60kg bags.

The UCDA conducted a domestic coffee consumption survey to ascertain the current levels and perception of consumers. The findings indicated that per capita coffee consumption was 0.7 kg per annum, slightly lower than 0.8 kg in 2018 domestic survey report. The MAAIF, under the Comprehensive Africa Agriculture Development Program (CAADP), conducted 25 production and marketing field data collection in 25 districts and compiled a CAADP African Biennial review report.

The NARO conducted 34 research studies on: (a) resilient food systems and enhanced nutrition (b), products for industry and market (c) and resilience to environmental and pandemic phenomena. It undertook compliance assessments from which 14 Environment and social management plans (ESMPs) for the 14 agro research facilities in 4 institutes were developed.

To enhance the capacity of oil palm growers and Buvuma Oil Palm Growers Cooperative Society Limited, the National Oil Palm Project (NOPP), with support from the Solidaridad Eastern and Central Africa Expertise Centre shared 1,000 Information, Education, and Communication (IEC) materials. These materials, which include training factsheets, transaction books, farmer diaries, and illustrated posters, are specifically tailored for smallholder Oil Palm Grower groups (OPGs).

iv) Nucleus farmer model across all ecological zones supported and developed.

The nucleus farmer model was implemented by MAAIF and NAADS, in partnership with private sector players for the oil palm and other strategic commodities like macademia and hass ovacado.

Through the National Oil Palm Programme (NOPP) the private sector partner Oil Palm Buvuma Limited (OPBL), continued establishing the nucleus estate for oil palm cultivation on Buvuma Island. The company developed a total of 2,496.12 hectares of oil palm, providing employment to 835 people, with 27% of the workforce being women and 70% youth. A nursery was established with 160,000 seedlings for supply to all hubs.

However, planting on 420.7 hectares that had been cleared, was halted by Project Affected Persons (PAPs) due to pending government compensation. This constraint significantly hindered the investor's progress in Buvuma, particularly in the areas of Kachanga, Kaziru, Bukalabati, and Bukiyindi. The OPBL developed 561.42 kilometres of access roads in the nucleus estate to facilitate efficient transportation of Fresh Fruit Bunches (FFB) and key services.

v) Partnerships and collaboration with other relevant stakeholders promoted.

Good performance was noted in the establishment of partnerships in the agro-industrialisation programme to enhance performance. There were numerous partnerships and collaborations in FY 2023/24 aimed at strengthening agro industrialisation, with a focus to boost agricultural production and productivity, research, technology generation and promotion, value addition and marketing. The MAAIF and NARO have played a pivotal role, with NARO accounting for about 60% of these partnerships and collaborations.

The NARO has formed diverse partnerships to advance agricultural development in Uganda, collaborating with universities including Makerere University, Buganda, Bunyoro, and Tooro Kingdoms, sister agencies like UCDA and international organizations like KOICA, FAO, and JICA. These efforts support initiatives like the 'Emwanyi Terimba' coffee campaign and technology development with Buganda kingdom. Additionally, NARO promoted internal collaboration among its research institutes, such as MUZARDI and NaLIRRI for poultry and piggery trials, and Ngetta ZARDI and NARL Kawanda for banana commercialization in Northern Uganda.

The MAAIF, through the National Oil Seeds Project, signed a Memorandum of Understanding (MoU) with NARO to develop and release improved seed varieties of sunflower, groundnuts, and sesame. The initiative focuses on increasing yield, seed size, pest and disease resistance, and oil content, aiming to enhance farmers' produce quality and boost their income. Makerere University partnered with NOSP through a signed MoU to implement adaptive research activities aimed at developing and releasing improved soybean seed varieties and related technologies. To implement this MoU, Makerere University partnered with Soybean Africa Limited (SAL) and Local Seed Businesses to enhance access to improved soybean varieties.

The Veg Seed Project, a partnership between NARO and KOICA, was implemented through Mukono ZARDI and NACCRI to strengthen Uganda's seed value chain for key vegetable crops like tomatoes, amaranths, pumpkin and shallot onions. The project focuses on improving vegetable variety development, seed certification, production, and dissemination, along with providing infrastructure, equipment, training programs, and technical expertise from Korean specialists.

Cooperatives partnered with key agencies like NARO, DDA, CDO, and MAAIF who advance agricultural research, technology adoption, value addition, agro-processing, and value chain development. These agencies provided cooperatives with inputs, knowledge, and skills, empowering them to boost productivity and sustainability, thereby transforming the agricultural sector.
The MAAIF, under the National Oil Palm Project (NOPP), signed a Memorandum of Understanding (MOU) with Solidaridad Eastern and Central African Expertise (solidaridarida ECA), a private consultancy firm. This partnership focuses on building capacity of stakeholders, particularly smallholder oil palm farmers, focusing on environmental and social sustainability.

The MAAIF collaborated with the National Environment Management Authority (NEMA) under the NOPP project to restore degraded areas. In Kalangala, a total of 19.8 hectares of degraded lakeshore were restored, with an additional 9 hectares restored in the Namunyolo local forest reserve in Buvuma District. Additionally, 600 hectares were demarcated in Kalangala District, bringing the cumulative restoration efforts during the reporting period to 101.4hectares, with a total of 600 hectares marked for protection.

The MFPED, BoU and Participating Financial institutions were collaborating in the implementation of the Agricultural Credit Facility. The MFPED, Agro-Consortium Limited and Insurance Regulatory Authority were collaborating in the implementation of the Agricultural Insurance Scheme. The implementation of the PDM in the agricultural sector involves collaborations between MAAIF, Ministry of Local Government (MOLG), Local Governments (LGs), Operation Wealth Creation (OWC) Secretariat, MFPED, Uganda Bureau of Statistics (UBOS), Office of the Prime Minister (OPM), Ministry of Gender, Labour and Social Development (MGLSD), Ministry of ICT

& National Guidance(MICT&NG), Ministry of Trade, Tourism and Industry (MTTI) and private sector players.

The Cotton Development Organisation (CDO) continued to collaborate with the Uganda Ginners and Cotton Exports Association (UGCEA) in the provision of cotton seeds, fertilizers, extension services and tractor hire services to farmers. The CDO collaborated with private sector bodies such as Fine Spinners to add value to the cotton to produce textiles and others to export the products.

Key challenges

i) Limited data analysis, poor storage and dissemination of agricultural data
ii) Limited access to the Parish-Based Management Information System (PDMIS) and
iii) Lack of a monitoring budget by the district production office posed a significant barrier to the effective monitoring and management of PDM.

Conclusion

The performance of Institutional Strengthening and Coordination sub programme was fair at 59% achievement of set targets. Major achievements were made in the reviews of legal and regulatory frameworks for the agro-industrialisation programme. Administrative offices were established to bring services closer to farmers. There was continuous development and roll out of online digital systems; partnerships and collaborations were expanded to foster agro-industrialisation and the PDM was fairly implemented.

Recommendations

i) The MAAIF, OPM, MFPED, UBOS and MOLG should collaborate to strengthen the monitoring and evaluation function and agricultural data management in the MDALGs.
ii) The MFPED and MOLG should grant viewing rights to the District Production Officers on the PDMIS and facilitate their supervision and monitoring of the PDM interventions, in collaboration with other district and parish leaders.
iii) Government should expedite the compensation process for the PAPs in Buvuma district.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 Programme Conclusion

This report presents findings from annual monitoring of the performance of the Agro-industrialisation Programme for the execution period 1st July 2023 to 30th June 2024.

The appropriated budget for the Agro-Industrialisation Programme for the FY 2023/24 including local government grant releases, was Ug shs 2,072.797 billion (bn) of which Ug shs 1,025.302 bn was external financing representing 49.5%. By 30th June, 2024, Ug shs 1,402.109 bn was released (67.6% of the appropriated budget) and Ug shs 1,151.781 bn spent (82.1% of the release). The budget release and expenditure performance for the programme was fair and good, respectively.

There was good progress in realization of the goal of the Agro-industrialisation Programme in terms of increasing commercialization and competitiveness of agricultural production and agro-processing. Overall, good performance (73.4%) was realised by the Agro-industrialisation Programme during FY 2023/24, although some interventions under performed. The programme average output performance was fair (69.4%) whereas the average outcome performance was good (85.3%).

Agricultural commercialisation and competitiveness was enhanced, especially for the priority commodities. The share of agricultural exports to total exports was 35% valued at US$ 2.5 billion for priority agricultural commodities. For example, the quantity and value of coffee exported during the FY2023/24 increased by 6.3% and 34.7%, respectively in comparison to FY2022/23. Other intermediate outcomes had very good performance and most of the set targets were achieved. This was evidenced with growth of the agriculture sector to 5.1% from 4.5% in FY2022/23. The increased production in agriculture, industry and associated services[17] contributed to the national growth of the economy. The Ugandan Economy attained a 6% growth in FY 2023/24 compared to 5.3% in FY 2022/23.

However, the fisheries sector declined from 3.4% in FY 2022/23 to -1.9% in FY 2023/24[18]. Key challenges were overfishing of capture fisheries, increased water pollution, illegal fishing, limited growth of the aquaculture industry, and high prices of fish feeds and fishing equipment.

Good performance was mostly contributed by the Storage Agro-Processing and Value Addition Sub-programme (87.4%) that had a minimal budget share in the Agro-industrialisation Programme of 3.53% This sub-programme attracts additional financing under the private sector and other government entities such as Uganda Development Bank, Microfinance Support Centre Ltd, Private Sector Foundation, Private Sector Development Programme and hence the good performance.

This was followed by the Agricultural Production and Productivity subprogramme (84.90%) that had the highest budget share (41%). The least contribution to performance was by the Institutional Strengthening and Coordination Sub-programme (59%) yet it attracted the second largest share of

[17] MFPED, 2024. Background to the Budget

[18] MFPED, 2024. Background to the Budget

the programme budget (38.72%). Most resources in this sub-programme were for salary enhancement of scientists and building administrative infrastructure some of which were not yet completed or operational. These interventions would have impact in the medium to long term on the programme outcomes.

Good performance was attributed to strategic investments such as in the Agricultural Credit Facility (ACF), Parish Development Model (PDM) and donor financed interventions especially the Agriculture Cluster Development Project (ACDP) and Agricultural Value Chain Development Programme (AVCP); innovative approaches in research and technology generation; faster processes due to introduction of digital technology; provision of agro-inputs and value addition and agro-processing equipment; favourable climatic conditions; multi-year investments in agricultural infrastructure and equipment; provision of water for production and mechanisation; and increased off budget support by private sector, bilateral funding organisations, local businesses and community counterpart funding.

Under performance in some areas was due to budget cuts; end of donor and off budget support leaving some of the outputs partially implemented; late releases and disbursements of both GoU and donor financing to implementing agencies resulting in late procurements and scaling back of work plans to less than 50% of planned outputs; restrictions on movement and sale of livestock due to the high prevalence of Foot and Mouth Disease (FMD) in the cattle corridor; encroachment on Government land; and sub-optimal performance or non-functionality of established agro-processing equipment due to lack of power connections, and inadequate raw materials and working capital

4.2 Overall challenges

1) Non-functionality of agro-processing facilities under ACDP and UDC; and incomplete or poorly maintained road chokes and bridges left after the closure of the ACDP.
2) Limited outreach to farmers (20%) of the Agricultural Insurance Scheme partly due to the inadequate subsidy of Ug shs 5 bn annually. There was also low understanding of the scheme among potential beneficiaries and local government leaders.
3) Late handover of project sites to the contractor (Nexus Green) under the Development of Solar Powered Water Supply and Irrigation Systems Project. This was majorly due to land wrangles and in some cases the water resource potential was not adequate to allow construction works.
4) Increased incidence of pests and diseases affecting crop and animal enterprises partly due to the weak research-extension-farmer linkages for delivering technology and extension advice to farmers. For example, the black coffee twig borer that is affecting robusta coffee farmers and the outbreak of foot and mouth disease in the cattle corridor.
5) Limited access to the Parish-Based Management Information System (PDMIS) and lack of a monitoring budget by the district production office posed a significant barrier to the effective monitoring and management of PDM

4.3 Recommendations

1) The UDC should expedite pre-investment studies and processes whereas the MAAIF, MEMD, MOWT and DLGs should collaborate to ensure that all established agro-processing facilities are connected to power and the donor financed roads are integrated and maintained in the relevant DLG budgets.
2) The MFPED to consider raising the subsidy under the Agricultural Insurance Scheme to at least Ug shs 10bn.
3) The MWE should work closely with the district local governments for timely identification of feasible sites.
4) The NARO, MAAIF and DLGs should collaborate and prioritize resources to strengthen the research-extension-farmer linkages and dissemination of appropriate technologies to farmers, especially the PDM beneficiaries to manage emerging pests and control of animal epidemics.
5) The MFPED and MOLG should grant viewing rights to the District Production Officers on the PDMIS and facilitate their supervision and monitoring of the PDM interventions, in collaboration with other district and parish leaders.

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Annex 1: Districts and Entities monitored for Annual FY 2023/24

Sub Programme	Sub-Sub programme/project	Sampled districts/ entities
Agricultural Production and Productivity	Small scale irrigation systems	Aganga SSI-, Abudama SSI- Apac district, Agule SSI- Katakwi district, Zigoti SSI-Mityana district, Buliisa-Mubende district, Lwemivubo, Nyabubare SSI in Mitooma district, Kyungu SSI-Mukono district, Mayuge, Iganga, Bugiri
	UGIFT (Uganda Intergovernmental Fiscal Transfer))	Nwoya, Bushenyi, Mukono, Bugiri, Pader, Luuka, Mbarara, Iganga, Kabale, Ntungamo, Mubende, Kiboga, Buvuma, Nakasongola, Nebbi, Yumbe, Amuru, Iganga, Bugiri
	AVCP (Agriculture Value Chain Project)	Acomai – Bukedea, Kasese, Kyegegwa, Masindi Kamwenge, Buwama, UNBS (Uganda National Bureau of Standards), Entebbe, Buvuma, Nakasongola
	Large Scale Irrigation Systems	Acomai irrigation scheme - Bukedea, Atari, igogero- naigomba irrigation scheme, Amagoro (Tororo district) and Enengo (Rukungiri district) Kabuyanda (Isingiro district), Matanda (Kanungu district),
	NARO (National Agriculture Research Organization)	NARO (National Agricultural Research Organization) secretariat, NALIRRI(National Livestock Resources Research Institute) – Maruzi,, NACRRI(National Crops Resources Research Institute) Namulonge; Ngetta ZARDI- Lira , NARL(National Agricultural Research Laboratories)Kawanda; COVAB (College of Veterinary Medicine, Animal Resources and Biosecurity),Mbarara Zonal Agricultural Research Development Institute (MBAZARDI), Kachwekano Zonal Agricultural Research Development Institute (KAZARDI), Rwebitaba Zonal Agricultural Research Development Institute Kabarole, Bulindi ZARDI (Zonal Agriculture Research Development Institute)- Hoima, NARO Kamenyamigo – Lwengo, Abizardi- Arua
	CDO (Cotton Development Organization)	CDO (Cotton Development Organisation) headquarters, CDO (Cotton Development Organisation)- Lira, Gulu, Nebbi, Pader-Pajule, Kasese (Southwestern), Mid-western region – Masindi, Lira, Packwatch
	NOSP (National Oil Seed Project)	Masindi, Hoima, Kikube, Kiryandongo, Nakasongola Luwero, Nakaseke, Kyankwanzi, Kibogo, Sembabule, Lira, Nebbi, Yumbe, Arua, Zombo, Packwach, Koboko, Maracha, Terego, Moyo, Gulu, Oyam
	UCDA (Uganda Coffee Development Authority	NACORI (National Coffee Research Institute) Kituzi, Bushenyi (Southwestern Region), Kabarole (Rwenzori region), Hoima (Western Region), UCDA (Uganda Coffee Development Authority) headquarters, Gulu (Mid Northern Region), Mbarara (Greater Mbarara), Kabale (Sub region), Kabarole (Rwenzori region), Mukono, Mbale, Budadiri, Sironko, Bulambuli, Kween

Sub Programme	Sub-Sub programme/project	Sampled districts/ entities
	NAADS (National Agriculture Advisory Services)	Mitooma, Kiboga, Lira, Wakiso, Oyam, Ntu7ngamoand Kitagwenda, Kyenjojo, Apac, Lira, Nebbi, Yumbe, Amuru, Mayuge
	AEGS / PMG (Agriculture Extension Services)	Nwoya, Buvuma, Bushenyi, Bugweri, Masaka, Kasese, Bunyagabo, Kanungu, Jinja, Mukono, Mbale, Amuria, Katakwi, Kalangala, Kabale, Mubende, Kyenjojo, Nakasongola, Kiryandongo, Apac, Nebbi, Yumbe, Amuru, Mayuge, Jinja, Buikwe, Luuka, Iganga, Bugiri
	NAGRC & DB (National animal genetic resources center and data bank)	Lusenke Stock Farm-Kayunga, Maruzi- Apac, Nwoya, Arua, Kasolwe Farm- Kamuli, Nshaara Ranch – Kiruhura, Sanga Field sSation – Mbarara, Ruhengyere Field Station – Mbarara, Rubona Stock Farm- Bunyangabu, Livestock Experiment Station (LES) Entebbe
	Labour Saving Technologies	Namalere Mechanization shop, Mechanization center Buwama, Butambala, Kyenjojo, Kiryandongo, Buikwe
	NOPP (National Oil Palm Project)	Kampala and Buvuma, Mayuge
	DDA (Diary development Authority)	Kampala, Gulu, Soroti, Mbarara, Kiboga, Entebbe
Storage, Agro-processing, and Value Addition	ACDP (Agricultural Cluster Development Project)	Kampala, Mubende, Kyenjojo, Masindi, Yumbe,
	AVCP (Agriculture value chain development project)	UNBS, Entebbe
	UDC (Uganda Development Corporation)	Nwoya, Soroti, Luuka, Yumbe, Budadiri
	CDO (Cotton development organization)	CDO (Cotton Development Organization)-Pader, Fine spinners-Bugolobi, CDO (Cotton Development Organization) headquarters, CDO (Cotton Development Organization)-Masindi, Southern Range Nyanza, Gulu, Lira, Iganga, Northeastern Regional Offices, Nytil,
	UCDA (Uganda Coffee Development Authority)	Bushenyi, NACORI ((National Coffee Research Institute)-Kituzi, Analytical laboratory-Lugogo, Gulu, Mbale
	NARO (National Agriculture Research Organization)	NALIRRI (National Livestock Resources Research Institute) and NACORI (National Coffee Research Institute)-Namulonge, Bulindi ZARDI (Zonal Agriculture Research Development Institute)- Hoima,
	DDA	Gulu, Entebbe, Soroti
	LEGS	MoLG, Nwoya, Gomba, Kibuku, Kyenjonjo, Nakaseke, Bunyangabu

Sub Programme	Sub-Sub programme/project	Sampled districts/ entities
	NOPP (National oil palm project)	Buvuma, MAAIF, Arua, Mayuge
Agricultural Market Access and Competitiveness	UNBS (Uganda national bureau of standards)	Wakiso
	MAAIF (Ministry of Agriculture, Animal Industry and Fisheries)	Kampala
	CDO (Cotton Development Organization)	Kasese (Southwestern), Gulu (East and West Acholi), Lira (West Nile), Hoima (Mid-west), Iganga (Busoga) CDO (Cotton Development Organization) headquarters,
	ACDP	Buvuma, masaka, kawanda- Wakiso, Ntungamo,
	Agri-led - NAADS	Kyenjojo, Kabarole, Ntungamo
	MOBIP	Sanga Kiruhura, Masindi, Nakasongola, Kiryandongo
	Labour saving project	Masaka,
	NOPP	Buvuma, Mayuge,
	UCDA (Uganda Coffee Development Authority)	UCDA (Uganda Coffee Development Authority) Headquarters, Analytical laboratory- Lugogo.
Enabling Environment and Strengthening Private Sector Institutional and Organizational Capacity (Agricultural Financing)	ACF (Agriculture Credit Facility)	Bank of Uganda, Mubende, Kampala, Wakiso, Mukono, Kalungu, Amuru, Jinja
	UDC (Uganda Development Corporation)	UDC Headquarters, Soroti, Luuka, Nwoya, Kabale
	Agricultural Insurance	Agro consortium (AIC) Kampala, Fortportal, Kabarole, Mbale
Institutional Strengthening and Coordination	PDM (Parish Development Model)	MAAIF (Production and productivity Pillar secretariat), Kabale, Ntungamo, Mubende, Kyenjojo, Kasese, Kiboga, Buvuma, Nakasongola, Kiryandongo, Nebbi, Yumbe, Buikwe, Jinja, Iganga, Bugiri

Source: Author's Compilation

Annex 2: Performance of the Agricultural Production and Productivity Sub programme as at 30th June 2024

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Water Purification Unit and Air Purification System constructed, Water Purification Platform, GMP Compliant vaccine production platform and Automated vaccine filling, capping and bottling line established, and vaccine research facility fitted with specialised laboratory equipment, vaccine seed/inoculum production line and commercial vaccine production line at NALIRRI (number of units)	31,977,342,015	89.9	100	8.00	3.50	48.66
Bio Security Gate, Perimeter Wall and Incinerator constructed at the Vaccine Facility (Number of units)	2,071,000,000	95.0	100	2.00	2.00	100.00
Min-Vaccine Administration Block at Nakyesesa remodelled (number)	792,292,000	68.2	100	1.00	0.60	88.00
Specialised laboratory and transport equipment, bioreactors and Environmental Management Central System procured and installed at the Vaccine Facility (number of items)	8,421,000,000	109.0	100	7.00	2.10	27.51
Consultancy services for construction and equipping the Vaccine Facility (number of consultancies)	6,830,000,000	92.5	100	8.00	5.20	70.24
Goat Research Facility, Queen Bee Rearing Facility, Paddocking System and Farm Access Roads, water works and reticulation, milling production line, biogas compression and packaging platform constructed/established and	3,000,000,000	92.4	100	7.00	4.73	73.12

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
research facility power back up system upgraded at Maruzi NALIRRI (number of facilities)						
Additional works and retention on Aflasafe facility, access roads, heifer barn, residential staff block at Nakyesesa and Maruzi NALIRRI	9,271,782,097	87.9	100	12.00	12.00	100.00
NAGRC&DB Gene Bank/Headquarters building constructed in Entebbe (number)	4,984,689,826	100.0	89	1.00	0.85	85.00
NAGRC&DB/AVCP Semen Laboratory constructed and renovated at the Bullstud in Entebbe (% works completed)	829,124,700	100.0	-	100.00	58.10	58.10
Operationalize agricultural extension system: Conduct specialized trainings of GAPs (Number of trainings conducted)	3,234,964,000	100.0	124	1344.00	1870.00	100.00
Operationalize agricultural extension system: Number of Master Trainers (MTs) whose capacity is built in coffee specific extension and facilitation skills to PCDAs	106,070,000	100.0	100	2.00	2.00	100.00
Operationalize agricultural extension system: No. of IQC trainings conducted in 4 Coffee growing regions	16,000,000	100.0	100	4.00	4.00	100.00
Operationalize agricultural extension system: Elementary Basic Quality Control (EBQC) training s for primary level players conducted - No. of trainings	12,035,250	100.0	100	5.00	5.00	100.00

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Operationalize agricultural extension system: Coffee Monitoring Operations of Coffee Quality in all regions conducted (Number of monitoring operations)	40,000,000	100.0	100	16.00	16.00	100.00
Operationalize agricultural extension system: 10 Trainings on Organic coffee production systems conducted for lead farmers and cooperatives	92,200,000	100.0	100	10.00	10.00	100.00
Operationalize agricultural extension system: No. of Uganda Barista trained Judge trained as a World Barista Judge	25,000,000	100.0	100	5.00	5.00	100.00
Operationalize agricultural extension system: Farmer mobilisation and sensitisation	372,300,000	100.0	100	4000.00	4120.00	100.00
Operationalize agricultural extension system: Monitor and training of farmers by the 220 UGCEA and Extension workers on postharvest handling (Number)	247,700,000	100.0	100	4.00	4.00	100.00
Enhanced efficiency in inputs distribution: Procure and distribute organic fertilizer for demonstrations to stumped coffee (Units)	1,200,000,000	-	-	14117.00	0.00	0.00
Enhanced efficiency in inputs distribution: Cashew nut seedlings procured and distributed (Number of seedlings)	978,944,400	97.1	100	233082.00	226253.00	100.00
Enhanced efficiency in inputs distribution: Soya bean seedlings procured and distributed (kg)	1,390,560,000	88.9	100	231760.00	205975.00	100.00
Enhanced efficiency in inputs distribution: Macadamia seedlings procured and distributed (Number of seedlings)	1,104,334,000	108.3	100	143420.00	155295.00	100.00

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Enhanced efficiency in inputs distribution: Hass ovacado seedlings procured and distributed (Number of seedlings)	4,362,302,000	99.4	100	733160.00	729075.00	100.00
Enhanced efficiency in inputs distribution: Sunflower seedlings procured and distributed (kg)	5,092,360,000	100.0	100	72748.00	72748.00	100.00
Enhanced efficiency in inputs distribution: Improved heifers procured and distributed (Number)	1,375,000,000	126.6	100	500.00	633.00	100.00
Enhanced efficiency in inputs distribution: Improved pigs procured and distributed (Number)	1,238,800,000	100.0	103	3097.00	3187.00	100.00
Enhanced efficiency in inputs distribution: one-day old broiler chicks, procured and distributed (Number)	684,000,000	100.0	100	68400.00	68400.00	100.00
Enhanced efficiency in inputs distribution: broiler growers' pellets, procured and distributed (KGS)	369,360,000	100.0	100	102600.00	102600.00	100.00
Enhanced efficiency in inputs distribution: brooded rainbow chicks, procured and distributed (Number)	80,500,000	100.0	100	23000.00	23000.00	100.00
Enhanced efficiency in inputs distribution: broiler starter pellets, procured and distributed (KGS)	259,920,000	100.0	100	68400.00	68400.00	100.00
Enhanced efficiency in inputs distribution: Tilapia fish fingerlings, procured and distributed (Number)	600,106,640	100.0	100	1579228.00	1579228.00	100.00
Enhanced efficiency in inputs distribution: Catfish fingerlings, procured and distributed (Number)	201,188,340	100.0	100	529443.00	529443.00	100.00

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Enhanced efficiency in inputs distribution: fish feeds, procured and distributed (KGS)	381,589,000	100.0	100	58706.00	58706.00	100.00
Enhanced efficiency in inputs distribution: Control BCTB in all regions through distributing 54,118 litres of pesticides Imidachloprid to coffee farmer organizations (Litres)	1,700,000,000	-	-	54118.00	0.00	0.00
Enhanced efficiency in inputs distribution: Procure and distribute 6,000 bottles of Cabrio fungicides to farmers (Number of bottles distributed)	600,000,000	100.0	100	11765.00	2352.00	19.99
Enhanced efficiency in inputs distribution: Procure and distribute 175 motorized Coffee pulpers to demonstrate improved processing technologies in 8 regions of Uganda	345,000,000	-	-	175.00	0.00	0.00
Enhanced efficiency in inputs distribution: 100,000 KR Plantlets resistant to Coffee Wilt Diseases distributed to farmers for establishment of mother gardens.	2,500,000,000	20.0	100	100000.00	43250.00	100.00
Enhanced efficiency in inputs distribution: 200 Kg of Cover crops supplied to farmers to mitigate climate change in Northern Uganda.	3,000,000	100.0	71	200.00	200.00	100.00
Enhanced efficiency in inputs distribution: Provision of cotton inputs - Pesticides (Number of cotton growing districts)	125,224,000	100.0	100	75.00	75.00	100.00
Enhanced efficiency in inputs distribution: Provision of cotton inputs - Knapsack spray pump (Number of cotton growing districts)	98,560,000	100.0	100	75.00	75.00	100.00
Enhanced efficiency in inputs distribution: Seed multiplication (Number of prisons)	1,133,081,600	68.3	96	33.00	7.00	31.05

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Enhanced efficiency in inputs distribution: Provision of cotton planting seed procured (Number of cottons growing districts	429,907,949	51.3	91	75.00	75.00	100.00
Enhanced efficiency in inputs distribution: Support to Farm Level production (Number of activities)	135,232,509,097,073	0.2	84	14.00	6.00	100.00
Multi-purpose water storage reservoirs including earth dams and valley tanks developed	82,680,265,372	85.8	59	100.00	60.00	69.96
Large scale irrigation schemes constructed	75,429,786,520	79.5	34	100.00	25.00	31.44
Medium-scale irrigation schemes constructed.	18,183,579,223	97.6	100	100.00	55.00	56.37
Solar-powered small-scale irrigation systems developed.	54,780,000,000	80.7	100	100.00	48.00	59.51
Sustainable management institutions for effective utilization of completed facilities established	46,273,915,641	86.3	73	100.00	58.00	67.19
Farmers sensitised on productivity enhancement technologies	1,730,213,480	78.8	69	100.00	29.00	36.80
Namalere Agricultural Mechanisation Centre rehabilitated (% works completed)	1,332,220,531	100.0	100	100.00	95.00	95.00
Construction, fencing, irrigation facilities delivered, and dams constructed in Katakwi and Bukedea districts (number of dams)	1,192,719,875	95.1	100	2.00	2.00	100.00
Cooperative and entrepreneur skills inculcated to farmers and farmer groups: Conduct 10 trainings on organic coffee production systems for lead farmers and cooperatives (M=200, F=2 00, Y=180) in 10 Regions (No. of training	64,200,000	71.8	74	10.00	5.00	69.63

Outputs Performance:						
	Financial Performance			Physical Performance		
Out put	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
conducted)						
Farmer organizations registered and profiled: Inspect, register and certify traders and primary processors to enforce compliance to quality standards and regulations in Eastern	337,600,000	100.0	96	1500.00	779.00	51.93
Invest in agricultural drugs manufacture and distribution: Vector and disease control: (Number of percentages of achievement)	11,687,000,000	100.0	100	8.00	4.00	50.00
Bunghokho Zonal Agricultural Mechanisation Centre rehabilitated (% works completed)	1,139,595,433	78.0	100	100.00	75.00	96.17
Sanga Zonal Agricultural Mechanization Centre rehabilitated (% works completed)	2,108,932,403	68.2	100	100.00	40.00	58.68
Average Outputs Performance						**79.44**
Outcomes Performance						
Outcome Indicator				**Annual Target**	**Achieved**	Score (%)
Proportion of farmers adopting improved agricultural technologies (%)				33	39.5	100.0
Post harvest losses for priority commodities (%)				18	16.4	91.1
Incidence of crop diseases and pests (%)				10	9	90.0
Percentage of water for production facilities that are functional (%)				89	88.5	99.4
						95.1
Average Outcomes performance						95.1
Overall sub-program Performance						**84.9**

Annex 3: Performance of the Storage, Agro-processing and Value Addition Sub-Programme by 30th June 2024

Intervention	Out put	Financial Performance			Physical Performance			Remark
		Annual Budget (bn Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Establish post-harvest handling, storage, and processing infrastructure	Post-harvest handling, storage and processing infrastructure established	15.662	100.0	10	246.00	133.00	54.07	Fair performance with 130 ACDP facilities functional
	Support to agro-processing and value addition	1.0	100.0	100	4.00	3.00	75.00	Good performance: 22 maize mills were delivered, installed and operationalized; 22 milk coolers were also installed.
	Milk postharvest handling and value addition	4.698	91.9	100	8.00	1.90	25.85	Poor performance: 11 milk coolers were procured while rehabilitation of the planned milk collection centres did take place.
	Education and skills development	0.744	83.7	100	12.00	7.50	74.65	Good performance: several stakeholders were trained in milk value addition and post-harvest handling.
Average Outputs Performance							**57.39**	**Fair performance**
Outcomes Performance								
Outcome Indicator					**Annual Target**	**Achieved**	Score (%)	**Remark**
Post-harvest loss for priority commodities (%)					18	16.4	100.0	Good performance
Storage capacity (MT)					1,350,000	1,267,768	93.9	Good performance
Manufacturing value added as a proportion of GDP					16.3	15.4	94.5	Good performance
Average Outcomes performance							96.1	**Very good performance**
Overall sub-program Performance							**71**	***Good performance -***

Annex 4: Performance of Agricultural Market Access and Competitiveness Sub-Programme by 30th June 2024

Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (bn Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Strengthen enforcement and adherence to product quality requirements	Certification permits for products and firms issued	0.940	100.0	100	5.00	3.00	60.00	Fair performance: the UNBS issued 4,951 product certification permits
	Quality, Standards, and accreditation	5.022	100.0	100	20.00	17.40	87.00	Good performance; The UCDA inspected and certified 6.129 million bags of coffee.
	Policies, regulations, and standards	0.102	100.0	100	1.00	1.00	100.00	Very good performance.
	Marketing and value addition	4.818	90.6	100	18.00	10.80	66.21	Fair performance: rehabilitation of national phytosanitary laboratory was ongoing at 40% physical progress whereas equipping of the national metrological laboratory was at 50%
	Quality assurance systems	6.07	99.7	85	13.00	13.00	100.00	Very good performance: the MAAIF facilitated export clearance for 2,501,402 MT of flowers, grains and pulse, import clearance of 575,653 MT of cuttings grains and pulses and issued 47,015 phytosanitary certificates.
Agricultural market infrastructure in rural and urban areas improved	Market infrastructure	0.048	100.0	100	2.00	1.80	90.00	Sanga meat stalls were completed and handed over to the users, Sanga slaughter facility was substantially complete awaiting completion of external land scalping works and water extension. Construction of a livestock market in Nyabyoto, Luuka district was completed but not yet in use.

Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (bn Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Strengthening capacities of public institutions in analysis, negotiation and development of international market opportunities	Coffee marketing	1.556	100.0	95	4.00	2.90	72.50	Good performance: the UCDA participated in both local and international coffee events aimed at marketing Ugandan coffee.
	Coffee value addition services	2.663	100.0	100	10.00	7.25	72.50	Good performance: training of baristas and roasters was done
	Support to coffee value chain stakeholders	1.430	100.0	96	8.00	6.20	77.50	Good performance: various actors trained in Q &R coffee grading, organic and specialty coffee production
Average Outputs Performance							**80.63**	**Good performance**
Outcomes Performance								
Outcome Indicator					**Annual Target**	**Achieved**	Score (%)	
Export value of priority agricultural commodities (USD BN)					2.2	2.5	100.0	Very good performance
Share of agricultural exports to total exports (%)					33	35	100.0	Very good performance
Average Outcomes performance							100.0	**Very good performance**
Overall sub-program Performance							**87.4**	**Good performance**

Source: Field findings and author analysis

Annex 5: Performance of Agricultural Financing Sub- Programme by 30th June 2024

Intervention	Out put	Financial Performance			Physical Performance			Remarks
		Annual Budget (bn Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Develop concessional long-term financing for agricultural infrastructure and capital investments	Soroti fruit factory	11.373	83.0	20	3.00	1.50	60.25	Fair performance: procurement and installation of semi-automated PET bottling line was done
	Atiak sugar factory	89.979	100.0	100	1.00	0.40	40.00	Procurement of equipment of large-scale agricultural equipment was ongoing with some already delivered
	Yumbe fruit factory	8.283	100.0	74	2.00	0.50	25.00	Poor performance: the factory acquired a vehicle to ease transport and also procure some production consumables; however, mango processing had not started.
	Loan facilities extended to farmers	14.160	99.4	100	8.00	7.40	93.09	Loan facilities worth Ug shs 162.7bn were disbursed by PFIs to 987 eligible borrowers. Ug shs 127.96 bn from PFI repayments remained unspent.
	ACF promoted and public sensitized	0.495	100.0	100	4.00	3.00	75.00	Awareness creation and promotional activities were conducted however, some rural districts remain unreached.
Finalize and implement the Agricultural Finance and insurance Policy	UAIS capitalized	5.0	100.0	100	1.00	1.00	100.00	A total of 37,114 farmers insured enterprises of which 35,265 farmers received a government subsidy worth Ug shs 3.245 bn.
Average Outputs Performance							**65.56**	**Fair performance**

Annex 6: Performance of Institutional Strengthening and Coordination Sub-Programme by 30th June 2024

Output	Financial Performance			Physical Performance		
	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Administrative infrastructure established: Administrative offices constructed at DLGs (Number of offices)	190,000,000	100.0	100	0.60	0.60	100.00
Administrative infrastructure established: Mini laboratories constructed in DLGs (Number of Mini labs)	78,711,000	100.0	55	1.00	0.60	60.00
Public-private dialogue guidelines developed (PDM implemented): PDM Administrative Costs in DLGs (Number of districts)	301,630,262	100.0	100	5.00	5.00	100.00
Public-private dialogue guidelines developed (PDM implemented): PDM Activities Monitored in DLGs (number of activities)	320,681,235	100.0	100	5.00	5.00	100.00
Public-private dialogue guidelines developed (PDM implemented): Enterprises that received funds (Number of enterprises)	28,500,800,000	100.0	100	35798.00	35798.00	100.00
Nucleus farmer model across all ecological zones supported and developed: Smallholder oil palm plantations developed (Acreage)	4,747,996,000	100.0	127	9889.00	835.00	8.44
Nucleus farmer model across all ecological zones supported and developed: Development of OPG organisation (Number of Organisations)	963,928,000	100.0	27	10.00	10.00	100.00
Nucleus farmer model across all ecological zones supported and developed: Support infrastructure development (kilometres)	768,518,000	100.0	169	1210.00	48.50	4.01
Nucleus farmer model across all ecological zones supported and developed: Alternative economic opportunities (Number of	307,115,000	100.0	119	23922.00	4063.00	16.98

Output	Financial Performance			Physical Performance		
	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
households)						
Nucleus farmer model across all ecological zones supported and developed: Mitigation of social risks (Number of activities)	609,249,000	100.0	51	8066.00	1115.00	13.82
Nucleus farmer model across all ecological zones supported and developed: Environment, Health and Safety (Hectares)	1,243,431,000	100.0	22	4000.00	672.00	16.80
Nucleus farmer model across all ecological zones supported and developed: oil palm sector development framework (Number)	130,000,000	100.0	13	3.00	1.00	33.33
Nucleus farmer model across all ecological zones supported and developed: Strengthen national capacity for oil palm research (Assorted activities)	544,467,000	100.0	6	1.00	0.62	62.00
Nucleus farmer model across all ecological zones supported and developed: Project management, Monitoring, Evaluation and Knowledge management (Assorted activities)	6,075,296,000	100.0	87	1.00	0.87	87.00
Regular collection and dissemination of agriculture data undertaken: Animal health surveillance done (Number of samples collected)	12,400,000	100.0	100	5850.00	5650.00	96.58
Regular collection and dissemination of agriculture data undertaken plant health surveillance undertaken (Quarterly)	3,200,000	100.0	100	4.00	4.00	100.00
Regular collection and dissemination of agriculture data undertaken: Vector and disease data collected in DLGs (number districts)	6,500,000	100.0	100	35.00	30.00	85.71
Total	**44,803,922,497**	**100.0**	**97**	**0.00**	**0.00**	**63.81**

Output	Financial Performance			Physical Performance		
	Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Average Outputs Performance						**63.81**
Outcomes Performance						
Outcome Indicator				**Annual Target**	**Achieved**	Score (%)
A functional Agriculture management information system (%)				1	0.2	20.0
Administrative Agriculture data collection system rolled out country wide (%)				1	0.3	30.0
Evidence based policies with supportive institutions and corresponding human resources (%)				100	100	100.0
Average Outcomes performance						50.0
Overall sub-program Performance						**59.0**

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