

# **AGRICULTURE SECTOR**

# SEMI-ANNUAL BUDGET MONITORING REPORT

FINANCIAL YEAR 2019/20



**APRIL 2020** 

Ministry of Finance, Planning and Economic Development P.O. Box 8147, Kampala www.finance.go.ug





# **AGRICULTURE SECTOR**

# SEMI-ANNUAL BUDGET MONITORING REPORT

FINANCIAL YEAR 2019/20

**APRIL 2020** 



# **TABLE OF CONTENTS**

ABBREVIATIONS.		iii
FOREWORD		vi
EXECUTIVE SUM	MARY	vii
CHAPTER 1: INT	RODUCTION	1
1.1 Background	L	1
1.2 Sector Obje	ctives	1
CHAPTER 2: MET	ГНОDOLOGY	3
	y	
2.3 Limitations	of the report	4
CHAPTER 3: SEC	TOR PERFORMANCE	5
3.1 Overall Sec	etor Performance	5
3.2 Agricultura	l Credit Facility	6
3.3 Cotton Dev	velopment Organisation	12
3.4 Dairy Deve	elopment Authority	17
3.5 Local Gove	ernments	22
3.6 Ministry of	Agriculture, Animal Industry and Fisheries	26
3.6.1 Backgr	ound	26
	ing National Food Security Through Increased Rice Production in Uganda	26
3.6.3 Nationa	al Oil Palm Programme	28
3.6.4 Uganda	Multi-Sectoral Food Safety and Nutrition Project	30
3.6.5 Departr	ment of Agricultural Extension and Skills Management	33
3.6.6 Departr	ment of Agricultural Investment and Enterprise Development	35
3.6.7 Norther	rn Uganda Farmers Livelihood Improvement Project	37
3.6.8 Region	al Pastoral Livelihood Improvement Project	40
3.6.9 Suppor	t to Sustainable Fisheries Development	43
3.7 National Ag	ricultural Advisory Services/Operation Wealth Creation	45
3.7.1 Introdu	ction	45
3.7.2 Govern	ment Purchases	46

3.7.3 Head quarters	47
3.8 National Animal Genetic Resources Centre and Data Bank	50
3.8.1 Introduction	50
3.8.2 Aswa Ranch	50
3.8.3 Kasolwe Stock Farm	51
3.8.4 Livestock Experimental Station	51
3.8.5 Lusenke Stock Farm	52
3.8.6 Njeru Stock Farm	52
3.8.7 Rubona Stock Farm	53
3.8.8 Ruhengyere Field Station	53
3.8.9 Sanga Field Station.	54
3.9 National Agricultural Research Organisation	58
3.9.1 Introduction	58
3.9.2 Abi ZARDI	58
3.9.3 Bulindi ZARDI	59
3.9.4 Headquarters and Support for NARO	59
3.9.5 Mbarara ZARDI	59
3.9.6 National Coffee Research Institute	60
3.9.7 National Semi-Arid Resources Research Institute	60
3.9.8 Rwebitaba ZARDI	61
CHAPTER 4: CONCLUSION AND RECOMMENDATIONS	65
4.1 Conclusion	65
4.2 Recommendations	65
REFERENCE	66
ΔNNFY	67

## **ABBREVIATIONS**

ACF Agriculture Credit Facility

AEG Agricultural Extension Grant

AIA Appropriation in Aid

BMAU Budget Monitoring and Accountability Unit

Bn Billion

BoQs Bills of Quantities
BoU Bank of Uganda

CAO Chief Administrative Officer

CDO Cotton Development Organisation

CF Community Facilitator

CGS Competitive Grant Scheme

CI Credit Institution

DAES Department of Agricultural Extension and Skills Management

DAIED Department of Agricultural Investment and Enterprise Development

DAMD Department of Aquaculture Management and Development

DDA Dairy Development Authority

DiFR Directorate of Fisheries Resources

DLG District Local Government

EDF European Development Fund

EDTS Entebbe Dairy Training School

EIA Environmental Impact Assessment

ESIA Environmental Social Impact Assessment

ESMP Environmental and Social Management Plans

EU European Union

FY Financial Year

GoU Government of Uganda

GRC Grievance Redress Committees

Ha Hectare

HRD Human Resource Development

IDA International Development Association

IDB Islamic Development Bank

IFAD International Fund for Agricultural Development

IFMS Integrated Financial Management System

JICA Japanese International Cooperation Agency

KCCA Kampala Capital City Authority

Kg Kilogram

LG Local Government

LLG Lower Local Government

MAAIF Ministry of Agriculture, Animal Industry and Fisheries

MCC Milk Collection Centre

MDAs Ministries, Departments and Agencies

MDIs Micro Deposit Taking Institutions

M&E Monitoring and Evaluation

MFPED Ministry of Finance, Planning and Economic Development

MoU Memorandum of Understanding

MT Metric Tonne

NAEP National Agricultural Extension Policy
NAES National Agricultural Extension Strategy

NAADS National Agriculture Advisory Services

NASARRI National Semi-Arid Resources Research Institute

NAGRC&DB National Animal Genetic Resources Centre and Data Bank

NARO National Agriculture Research Organization

NEMA National Environment Management Authority

NDAL National Dairy Analytical Laboratory

NEC National Enterprise Corporation

NDP National Development Plan

NLI National Leadership Institute

NOPP National Oil Palm Programme

NPL Non-Performing Loans

NTR Non Tax Revenue

NUFLIP Northern Uganda Farmers Livelihood Improvement Project

OWC Operation Wealth Creation

PFI Participating Financial Institution

PBB Programme Based Budgeting
PFM Public Financial Management
PMG Production and Marketing Grant
PMU Programme Implementation Unit

PPDA Public Procurement and Disposal of Assets

PPP Public-Private Partnership
PWD Persons with Disabilities

Q Quarter

RPLRP Regional Pastoral Livelihood Improvement Project

TA Technical Assistance

TSA Treasury Single Account

UGCEA Uganda Ginners and Cotton Exports Association

Ug shs Uganda Shillings

UNFSNP Uganda Multisectoral Food Safety and Nutrition Project

VHT Village Health Teams

ZARDI Zonal Agricultural Research Development Institute

## **FOREWORD**

The Government strategy this Financial Year 2019/20 is to promote import substitution and export promotion, and incentivize private sector development. It is envisioned that this will be achieved through industrialization anchored on agriculture and agro-industrialization, manufacturing, and mineral potential. This will also ensure inclusive growth and the creation of jobs, while promoting development of other key primary growth sectors.

According to findings shared by the Budget Monitoring and Accountability Unit (BMAU), majority of the sectors monitored got over 50% of their budget releases, however fair performance was noted in terms of service delivery. This is attributed to the persistent challenges of delayed procurement and poor planning which must be dealt with as the country moves to implement the third National Development Plan.

This report is produced at time when the whole world is affected by the novel coronavirus disease (COVID-19). It is prudent that the sectors devise cost effective means to ensure that their stakeholders will still benefit from the government programmes/projects.

Keith Muhakanizi

Permanent secretary and Secretary to the Treasury

## **EXECUTIVE SUMMARY**

#### Introduction

The Agriculture Sector is composed of nine votes, namely: i) Vote 010: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) ii) Vote 121: Dairy Development Authority (DDA) iii) Vote 125: National Animal Genetic Resource Centre and Data Bank (NAGRC&DB) iv) Vote 142: National Agricultural Research Organisation (NARO) v) Vote 152: National Agricultural Advisory Services (NAADS) Secretariat vi) Vote 155: Cotton Development Organisation (CDO) vii) Vote 160: Uganda Coffee Development Authority UCDA viii) Vote 122: Kampala Capital City Authority (KCCA) and ix) Vote 501-850 Local Governments (LGs) - District Production Services.

This report reviews selected key programmes and sub-programmes within the Agriculture Sector, based on approved plans and significance of budget allocations to the Votes. Attention is on large expenditure programmes including both development expenditure and recurrent costs.

Programmes selected for monitoring were based on planned annual outputs; regional representation; level of capital investment; and value of releases during half year, Financial Year 2019/20; multi-year programmes that were having major implementation issues; and programmes prioritized by Government as having major contribution to achievement of sector and national priorities.

The methodology adopted for monitoring included literature review of annual progress and performance reports; interviews with the respective responsible officers or representatives; and observations or physical verification of reported outputs. Physical performance was rated using weighted achievement of the set output targets by 31<sup>st</sup> December, 2019.

# Financial performance

The approved budget for the Agriculture Sector for FY 2019/20 excluding arrears and external financing is Ug shs 720.251 billion, of which Ug shs 404.321 billion (56%) was released and Ug shs 317.498 billion (79%) spent by 31st December 2019. This was very good release and good expenditure performance.

# Highlights of sector performance

# Overall sector performance

The overall agriculture sector performance during July to December 2019 was good (70.46%). The good performing programmes were: Agricultural Advisory Services Programme (92.38%), Agricultural Credit Facility (85.23%), Cotton Development Programme (79.65%), Agricultural Research Programme (76.40%). The fairly performing programmes were: Breeding and Genetic Development Programme (63.57%). The poorly performing programmes were: Dairy Development and Regulation Programme (37.25%), and Crop Resources Programme (34.29%).

Good performance was associated with timely releases and procurements; increased agricultural infrastructure development; availability of donor financing as well counterpart funding, and distribution of increased volumes of inputs, machinery and equipment.

Poor performance was due to delayed initiation and conclusion of procurements; land grabbing and encroachments on NARO, DDA and NAGRC&DB land; extreme climate conditions leading to increased incidence of pests and diseases and high crop and animal mortality; low capacity of contractors to execute infrastructure works in time; and budget short falls. Other key PFM related challenges were late approval and disbursement of funds by Accounting Officers; expenditure of FY 2019/20 funds on arrears of 2018/19 and re-allocation of resources mid-year.

# **Agricultural Advisory Services Programme**

The overall semi-annual performance of the NAADS/OWC was very good (92.38%). Inputs, agromachinery and value addition equipment were distributed as planned. Key challenges: inadequate inputs and equipment procured due to re-allocation of funds to accumulated arrears from FY 2018/19 and support for Atiak Sugarcane OutGrowers Cooperative Society Limited; delayed delivery of agro-machinery and value addition equipment due to lengthy and complex procurement processes involving international competitive bidding procurement; inadequate extension services tagged to inputs distribution led to lack of preparedness of farmers to receive materials in many districts; and poor handling and management of inputs provided to farmers in district local governments.

# **Agricultural Credit Facility**

Between 2009 and 31<sup>st</sup> December 2019, the scheme has received 872 loan applications amounting to Ug shs 845.85billion, of which Ug shs 408.62billion has been disbursed to 668 eligible projects. The Non-Performing Loans amounted to Ug shs 2.90 billion (1.40% of the total disbursements). The performance of the ACF was good (85.23%). Farmers utilized loans on planned activities for farm improvement, mechanization, value addition, irrigation and expansion of herds and plantations. Key challenges were inadequate publicity, delayed processing of loans (2 to 9 months) and negative effects on production and profitability of extreme climatic conditions and lack of extension advice.

# **Agricultural Research Programme**

The overall performance of the Agricultural Research Programme was good (76.40%). Technology generation and infrastructure development continued at all the NARO institutions. Performance was constrained by inadequate staffing and vehicles, slow approval of scope variations for infrastructure development, lengthy procurement procedures, slow disbursement of funds from Headquarters and climate related constraints. Experimental results were distorted by re-allocation of NARO land to investors leaving less for carrying out meaningful research.

# **Breeding and Genetic Development**

The overall performance of the Breeding and Genetic Development Programme was fair (63.57%). Some key outputs especially in the area of infrastructure development were achieved, while procurements for equipment and other consumables were still ongoing. Planned activities at the ranches were partially implemented due to inadequate disbursements from NAGRC&DB Headquarters. Low performance of the breeding programme was noted as many animals were old and of low quality and animal disposal was not done in the absence of a functional board. The mortality of goats was high due to the high prevalence of diseases and negative effects of heavy rains. Land encroachment in Aswa Ranch, Sanga Field Station, Njeru Stock Farm and Ruhengyere Field Station by Government/public officials constrained the breeding programme.

# **Cotton Development Programme**

The overall performance of the Cotton Development Programme was good (79.65%) By 31<sup>st</sup> December 2019, inputs and equipment were distributed to farmers and seed growers; extension workers (450) were deployed to support the farmers; and farmer training was conducted. The construction of the bale shed at the Pader Cotton Seed Dressing plant was 95% complete; all the installed cotton dressing machines were operational except the seed bagging machine. The key challenges related to: reduction in cotton production and quality due to extreme/erratic weather conditions, increased incidence of weeds, pests and diseases, untimely delivery of inputs and inadequate pesticides supplied. The crop survival rate was estimated at: West Nile sub-region (40%) and Mid-Western and Central region (60%).

# **Crop Resources Programme:**

The overall performance of the Crop Resources Programme was poor (34.29%). The sampled MAAIF sub-programmes – Enhancing National Food Security Through Increased Production in Eastern Uganda, National Oil Palm Programme and Uganda Multisectoral Food Safety and Nutrition Project – underperformed due to inability of Government to fulfil prior conditions to trigger donor disbursements; delayed approval and disbursement of funds; delays in transfer of funds from project designated accounts in LGs to District collection Accounts. All these factors led to low absorption of disbursed funds and partial implementation of planned outputs.

# **Dairy Development and Regulation Programme**

The performance of Dairy Development and Regulation Programme was poor (37.25%). The poor performance was due to the following factors: Most procurements were ongoing and delivery of key dairy equipment and infrastructure was expected in Q3 and Q4; there was partial achievement of outputs at the regional offices due to budget cuts and inadequate disbursed funds and low staffing. By 31st December 2019, dairy stakeholders were trained and supported with critical farm inputs. Quality assurance and regulation was done through inspection, registration and market surveillance. A budget shortfall of 47.2% in Quarter 1 led to delayed initiation of procurements Land encroachment at Entebbe Dairy Training School whereby five out of the 10 available acres were sold off by Fishways Limited constrained performance. The matter had been in courts of law since October 2018 and yet to be concluded.

#### **District Production Services**

The overall performance of the District Production Services was good (78.38%). By 31st December 2019, partial implementation of the planned outputs was undertaken. Key activities implemented in the LGs included: provision of extension services to farmers; establishment of demonstration sites; pest and disease surveillance and control; and establishment of agricultural infrastructure. Key challenges were i) Loss of crop and animal production due to extreme weather conditions including drought, floods, hailstorms, exacerbated by the rising incidence of pests and diseases; ii) Non-compliance of LGs with Public Financial Management (PFM) laws and regulations – delayed approval and disbursement of funds by Accounting Officers; commitment of GoU above the funds available in a financial year

# **Key challenges**

i) Land encroachment in Aswa Ranch, Sanga Field Station, Njeru Stock Farm and Ruhengyere Field Station by Government/public officials due to lack of demarcation of boundaries, absence of land titles, and parceling out of land to individuals, private investors and other entities by Government.

- ii) Low absorption of released funds due to delayed initiation and concluding of procurement processes for infrastructure works; inadequate disbursements to the ranches and stations.
- iii) Delayed start of donor funded projects due to multiple complex approval systems between MAAIF and donors and low readiness of MAAIF to implement the prior conditions to trigger disbursement.
- iv) High crop and animal mortality and low production due to adverse climatic conditions.

#### Recommendations

- i) The Uganda Land Commission, MAAIF and agencies should expedite surveying of all NAGRC&DB, NARO and DDA lands, demarcate boundaries and ensure that they are all titled. Land cases of encroachment should be followed up in courts of law, concluded and the illegal encroachers evicted.
- ii) The MFPED should enforce compliance of MAAIF and agencies to PFM reforms, particular aspects relating to stopping accumulation of arrears, re-allocations mid-year, delayed approvals of requisitions by Accounting Officers, delayed contracting processes and late provision of advisory notes to spending agencies.
- iii) The MFPED and donor agencies should review all the prior conditions attached to donor financing and find practical solutions to expedite their implementation.
- iv) The MAAIF and agencies and LGs should promote and support climate smart agriculture at farm level, including use of appropriate irrigation technologies and crops tolerant to drought, diseases and pests.



# **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 mobilization, ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development". It is in this regard that the ministry has intensified implementation of Public Financial Management (PFM) reforms focused on enhanced resource mobilization and funds disbursement to Ministries, Departments, Agencies and Local Governments for improved service delivery.

As a result of the increased public investments, there has been significant improvement in citizens' access to basic services, particularly in the sectors of health, education, water and environment, agriculture and roads. The services being delivered, however, are not commensurate to the resources that have been disbursed, signifying accountability and transparency problems in the user entities.

The Budget Monitoring and Accountability Unit (BMAU) was established in FY2008/09 in MFPED to provide comprehensive information for removing key implementation bottlenecks. The BMAU is charged with tracking implementation of selected government programmes or projects and observing how values of different financial and physical indicators change over time against stated goals and targets (how things are working). This is achieved through semi-annual and annual field monitoring exercises to verify receipt and application of funds by the user entities.

The monitoring is confined to levels of inputs, outputs and intermediate outcomes in the following areas: Accountability, Agriculture; Infrastructure (Energy and Roads); Industrialization; Information and Communication Technology; Science, Technology and Innovation, Social services (Education, Health, and Water and Environment); and Public Sector Management. The BMAU prepares semi-annual and annual monitoring reports of selected government programmes and projects. This report presents the findings from field monitoring of the Agriculture sector for the budget execution period of July to December 2019. The field exercises were conducted during January to February 2020.

# 1.2 Sector Objectives

The overall agriculture sector objective in the National Development Plan (NDPII)<sup>1</sup> is to enhance rural incomes, household food and nutrition security, exports and employment. The overall goal of the sector is to achieve an average growth rate of 6% per year over the period 2015/16 to 2019/20<sup>2</sup> by focusing on four strategic objectives namely: increasing production and productivity of agricultural commodities and enterprises; increasing access to critical farm inputs; improving access to markets and value addition; enhancing the quality of agricultural commodities; and strengthening the agricultural services institutions.

GoU, 2015.

<sup>2</sup> Agriculture Sector Investment Plan 2015/16-2019/20.

Actions to achieve the objectives are implemented by nine sector votes, namely: i) Vote 010: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) ii) Vote 121: Dairy Development Authority (DDA) iii) Vote 125: National Animal Genetic Resource Centre and Data Bank (NAGRC&DB) iv) Vote 142: National Agricultural Research Organization (NARO) v) Vote 152:

National Agricultural Advisory Services (NAADS) Secretariat vi) Vote 155: Cotton Development Organization (CDO) vii) Vote 160: Uganda Coffee Development Authority UCDA viii) Vote 122: Kampala Capital City Authority (KCCA) and ix) Vote 501-850 Local Governments (LGs) - District Production Services.



# **CHAPTER 2: METHODOLOGY**

# 2.1 Scope

This report is based on the selected programmes that were monitored in the Agriculture Sector during FY 2019/20 semi-annual. The following criteria guided selection of programmes and sub-programmes that were monitored:

- Significance of the budget allocations to the votes within the sector budgets, with focus being on large expenditure programmes. Preference is given to development expenditure, although some recurrent costs are tracked.
- Multi-year programmes that were having major implementation issues were also visited.
- Programmes prioritized by Government as having major contribution to achievement of sector and national priorities.

The semiannual monitoring was undertaken in seven out of nine votes namely: CDO, MAAIF, NAADS, NAGRC&DB, NARO, DDA and LGs. In addition, the Agricultural Credit Facility (ACF) was monitored. Eight out of 13 programmes in the sector were monitored in these votes namely: i) Agricultural Advisory Services ii) Agricultural Research iii) Cotton Development iv) Dairy Development v) Crop Resources vi) Animal Resources vii) Agricultural Extension and Skills Development viii) Breeding and Genetic Development ix) District Production Services. The districts and central government entities that were monitored are listed in Annex 1.

# 2.2 Methodology

Physical performance of programmes and outputs was assessed through monitoring a range of indicators and linking the progress to reported expenditure. Across all the programmes and sub-programmes monitored, the key variables assessed included: performance objectives and targets; inputs and outputs and the achievement of intermediate outcomes. Gender and equity commitments were also assessed.

# 2.2.1 Sampling

A combination of random and purposive sampling methods were used in selecting projects from the Ministerial Policy Statements and progress reports of the respective departments. Priority was given to monitoring outputs that were physically verifiable. In some instances, multi-stage sampling was undertaken at three levels: i) Sector programmes and projects ii) Local governments and iii) Project beneficiaries.

The outputs that were monitored were selected so that as much of Government of Uganda (GoU) development expenditure as possible was monitored during the field visits. Districts were selected in a manner that allowed for representation of the regions in Uganda.

#### 2.2.2 Data Collection

Data was collected from various sources through a combination of approaches:

 Review of secondary data sources including: Ministerial Policy Statements for FY2019/20; National and Sector Budget Framework Papers; Sector project documents and performance reports in the Output Budgeting Tool (OBT), Sector Quarterly Progress Reports and Work plans, District Performance Reports, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, and data from the Budget website.

- Review and analysis of data from the Integrated Financial Management System (IFMS); Quarterly Performance Reports and bank statements from some implementing agencies.
- Consultations and key informant interviews with project managers in implementing agencies both at the Central and Local Government level.
- Field visits to project areas for primary data collection, observation and photography.
- Call-backs in some cases to triangulate information.

## 2.2.3 Data Analysis

The data was analyzed using both qualitative and quantitative approaches. Comparative analysis was done using the relative importance of the outputs and the overall weighted scores.

Relative importance (weight) of an output monitored was based on the amount of budget attached to it; thus the higher the budget the higher the contribution of the output to the sector performance. This was derived from the approved annual budget of each output divided by total annual budget of all outputs of a particular programme/project. The weight of the output and percentage achievement for each output were multiplied to derive the weighted physical performance.

Outcome performance analysis was based on the level of achievement of outcome indicators outlined in the Sector Ministerial Policy Statement or its associated Budget Framework Paper within a sampled programme. The achievement of the outcome indicators relied primarily on secondary data provided by the sectors from the Programme Budgeting System (PBS). The average of the outcome performance was calculated from the percentage achievement of the indicators.

The overall programme performance is a summation of all weighted scores for its outputs and the outcomes in a ratio of 65%:35% respectively. On the other hand, the overall sector performance is an average of individual programme performances that make up the sector. The performance was rated on the basis of the criterion in Table 2.1.

Table 2.1: Assessment guide to measure performance of projects monitored in FY 2019/20

SCORE	COMMENT
90% and above	Very Good (Achieved at least 90% of both outputs and outcomes)
70%-89%	Good (Achieved at least 70% of both outputs and outcomes)
50%- 69%	Fair (Achieved at least 50% of both outputs and outcomes)
49% and below	Poor (Achieved below 50% of both outputs and outcomes)

# 2.3 Limitations of the report

- i) Non-accessibility of some sampled villages and farmers due to poor road conditions arising from floods.
- ii) Inadequate time for monitoring a representative sample of farmers
- iii) Poorly specified programme indicators, outputs and targets that constrained performance measurement



# **CHAPTER 3: SECTOR PERFORMANCE**

### 3.1 Overall Sector Performance

## Overall financial performance

The approved budget for the Agriculture Sector for FY 2019/20 excluding arrears and external financing is Ug shs 720.251 billion, of which Ug shs 404.321 billion (56%) was released and Ug shs 317.498 billion (79%) spent by 31st December 2019 (Table 3.1). This was very good release and good expenditure performance.

Table 3.1: Agriculture sector financial performance by 31st December 2019 (billions excluding arrears and external financing)

Vote/ grant	Approved budget (Ug shs billion)	Oudget (Ug shs billion) Expenditure (Ug shs		% budget released	% release spent
MAAIF	186.192	95.230	56.785	51%	60%
DDA	10.132	4.889	2.920	48%	60%
NAGRC & DB	63.242	36.069	25.645	57%	71%
NARO	79.662	36.713	30.585	46%	83%
NAADS Secretariat	145.894	81.579	60.214	56%	74%
CDO	8.642	4.180	3.157	48%	76%
UCDA	96.702	77.789	70.909	80%	91%
LGs (District Production Services)	122.57	64.813	64.813	53%	100%
KCCA	7.188	3.059	2.470	43%	81%
Total	720.224	404.321	317.498	56%	79%

Source: MFPED Approved Budget Estimates FY 2019/20; Budget Directorate, MFPED; Integrated Financial Management System (IFMS); Agriculture Sector Quarter 4 Reports; Field Findings

### Overall performance

The overall semi-annual performance of the agricultural sector for FY 2019/20 was 70.46% (Table 3.2). The best performing Vote was NAADS/OWC followed by the ACF and CDO. The worst performing Vote was DDA.

Table 3.2: Agricultural Sector Overall Performance by 31st December 2019

Vote	Performance (%)
Cotton Development Organisation	79.65
Dairy Development Authority	37.25
Ministry of Agriculture, Animal Industry and Fisheries	65.60
National Agricultural Research Organization	76.40
National Agricultural Advisory Services/Operation Wealth Creation	92.38
National Animal Genetic Resource Centre and Data Bank	63.57
Local Governments	78.38
Average sector performance	70.46
Agricultural Credit Facility	85.23

Source: Field findings

# **Detailed programme performance**

# 3.2 Agricultural Credit Facility

#### 3.2.1 Introduction

The Government of Uganda (GoU) is implementing the Agricultural Credit Facility (ACF) since 2009 to facilitate the provision of medium and long term financing to projects engaged in agriculture, agro processing and the grain trade at more concessionary terms. The interest chargeable is 12% per annum while working capital for grain trade does not exceed 15% per annum. Block allocations of Ug shs 20 million are provided to micro borrowers without collateral. The implementing agencies are Ministry of Finance, Planning and Economic Development (MFPED), Bank of Uganda (BoU) and Participating Financial Institutions (PFIs).

Since inception, the scheme has received 872 loan applications amounting to Ug shs 845.85 billion, of which Ug shs 408.62 billion has been disbursed to 668 eligible projects, with the GoU refinancing Ug shs 207.03 billion to the respective PFIs by 31<sup>st</sup> December 2019 (BoU, 2019). The Non-Performing Loans (NPL) amounted to Ug shs 2.90 billion representing 1.40 percent of the total disbursements (BoU 2020).



#### 3.2.2 Performance





ACF financed sugarcane plantation on Mr. Byenkya's farm in Kiranga village Hoima District

**AFRO-KAI Limited** located in Katalemwa, Mattuga Village, Gombe Parish, Gombe Sub-county in Wakiso District accessed Ug shs 15.31bn that was invested in commodity trading, acquisition of agroprocessing machinery and setting of four fish demonstration ponds one of which was operational. The machinery that was procured included a fish feed facility, fertilizer blending machine, silos facilities and cleaning machinery.

Key challenges were inadequate publicity and information disseminated by the commercial banks to the public about the ACF thus limiting access; lower production and profits from the business due to inadequate working capital to acquire sufficient grain and operationalize all the acquired machinery; lengthy bureaucratic processes of accessing the loan and lack of adequate collateral to access the required loan amount for a profitable business.

**Byenkya's farm** in Kiranga Village Buraru, Parish Kyabigambire Sub-county in Hoima District accessed Ug shs 150 million that was invested in establishing 50 acres of a sugar plantation. The loan was easily accessed and the terms and conditions were considered fair by the beneficiary. The plantation was performing well except for drought effects during the dry seasons.



ACF financed sugarcane plantation on Mr. Byenkya's farm in Kiranga village Hoima District

**Eituno's farm** in Abiya Village, Dokolo Parish, Gweri Sub-county, Soroti District accessed Ug shs 167m in FY 2018/19 to establish a dam for irrigating vegetable and citrus gardens during the dry seasons. The dam was established and used as planned. However, the dam's usefulness and project viability reduced with the loss of market for fruits after closure of Teso Fruit Factory and reduced orders for fruit seedlings by Operation Wealth Creation (OWC). By FY 2018/19, the farmer was supplying 200,000 orange seedlings annually to OWC programme at Ug shs 3000 per seedling; in FY 2019/20, the OWC only ordered 2,000 seedlings leading to wastage of the rest of the seedlings in the nurseries as there were no alternate markets.

The farmer had planted 3,000 orange trees that were in fruiting stage. About 80% of the fruits were left to rot due to lack of market; the farmer had started cutting the orange trees to change land use to other viable enterprises. Other challenges: 50% mortality rate was registered for the vegetables due to heavy rains and flooding. The loan beneficiary failed to repay the loan on time; he had two installments left to pay off about Ug shs 41m each. He had paid Ug shs 20m of the first instalment that was overdue by three months. The bank had sent debt collectors to recover the remaining unpaid installments. In addition, rains had washed away parts of the access roads making it difficult for buyers to reach farms.

Gift Maize Mill in Musoke Zone, Sabagabo Parish, Makindye Division in Wakiso District accessed Ug shs 90 million in July 2019 that was used to trade grains. Loan processing delayed by three months due to wrong records on the collateral (land title) that were rectified through an affidavit by the beneficiary. The profits in the business were low due to the high price of grains. It was recommended that the interest rate should be reduced to 13% to allow the beneficiaries earn a reasonable profit from grain trading.

Kananura's farm in Mwengula Village, Kitagata Parish, Kyeizoba Sub-county, Bushenyi District accessed Ug shs 470 million that was used for farm improvements. The completion rate of various activities against target was as follows – bush clearing, renovation of a spray pump and establishment of four acres of banana plantation (all at 80%); procurement of 20 cows (100%); paddocking (90%); water system improvement (50%) and all workers were fully paid. The beneficiary appreciated the ease of accessing the loan from the commercial bank. The key challenges were increased livestock pests and diseases and unavailability of farm workers that reduced farm production.

Lake Victoria Precious Fish Limited in Bukule Village, Mpata Sub-county, Mukono District accessed Ug shs 400 million that was used to procure fish cages and accessories. Key challenges were: Less funds disbursed than what was requested for; a time lag of eight months between loan application and access to funds; and inadequate technical guidance from the bank during loan packaging as the staff lacked sufficient knowledge on risk assessment of agricultural projects.



Fish cages established by Lake Victoria Precious Fish Limited in Mukono District



ACF financed tractor on Lukuba's farm in Masindi District

Lukuba's farm in Bujenje Kiina Village, Lukondwa Parish, Bwijanga Sub-county, Masindi District accessed a tractor that was procured by the bank at Ug shs 95 million. The farmer topped the ACF with Ug shs 37 million of their own resources to get a high quality tractor with a disc plough. The tractor was used starting July 2019 for ploughing the garden planted with sugarcane, maize, beans and groundnuts.

The crop survival rate was low (40%) due to negative effects of heavy rains and floods. The tractor was delivered late by the service provider at the onset of the dry season; this reduced the profits from the business as the machine was redundant and could not be hired out.

**Maganjo Grain Millers Ltd** in Wakiso District accessed Ug shs 3.071 billion used to procure a wheat processing line. The machine was in transit from the international suppliers expected in March 2020. Loan processing took six months; the beneficiary appreciated the 7 months grace period and fair interest rate (12%).

**Muwomba's farm** in Buselenge Village, Busalama Parish, Bukanga Sub-county, Luuka District received Ug shs 30 billion but information was not availed about the loan usage.

M/S Jovah International Limited in Kititi Village, Kyantale Parish, Kyanamukaka Subcounty in Masaka District received Ug shs 230 million that was used to renovate a poultry house and stocking 4,500 birds; construct a store and cow kraal; establish an irrigation system that was at 20% completion; and procure a tricycle, 11 bee hives and 6,000 coffee seedlings. The kraal was expanded with own resources from the planned holding capacity from 10 cows under the ACF arrangement to 42 cows. Due to labor scarcity, less coffee seedlings were procured against the planned 10,000 seedlings.



ACF funded tricycle parked in the recently established cow kraal in Masaka District

**Birya United Agencies Ltd** in Nyakakoni B Rukindo Ward Ntakaijo Division in Mbarara District accessed Ug shs 2.2 billion that was complemented by own resources/other funds (Ug shs 4 billion) to procure grain that was supplied to Ministry of Defence, importation of two silos and construction of bases for them, construction of an administration block, warehouse, perimeter wall and weigh bridge house and procurement of three water tanks. The main challenge was the delayed processing of the loan by five months that negatively affected the profits from grain trade as prices had escalated.





Warehouse (left) and silo base (right) constructed at Birya United Agencies Ltd in Mbarara District

# 3.2.3 Overall performance of the Agricultural Credit Facility

The semi-annual performance of the ACF during FY 2019/20 was good (85.23%) as shown in table 3.3. Farmers accessed and utilized the loans on the planned activities in the areas of farm improvement, mechanization, value addition, irrigation and expansion of herds and plantations.

Table 3.3: Performance of the Agricultural Credit Facility by 31st December 2019

Output	Annual Budget (Ug shs)	Cum. Receipt ( Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Commercial sugarcane plantation established on Mr. Byenkya's farm in Hoima district (acres)	150,000,000	150,000,000	50.00	50.00	0.56
Wheat processing line, two sinotruk tractor heads and two closed box semi-trailers procured by Maganjo Grain Millers in Wakiso district (items)	3,071,662,000	3,071,662,000	5.00	0.60	1.37
Maize and bean grains traded by Gift Maize Mill in Wakiso district (tonnes)	90,000,000	90,000,000	20.00	45.00	0.33
Four ponds established and four sets of machinery procured by AFRO KAI LIMITED in Wakiso district (lots)	20,000,000,000	15,310,000,000	8.00	6.00	72.65
Tractor procured on Mr. Lukuba's farm in Masindi district (number)	95,000,000	95,000,000	1.00	1.00	0.35



Output	Annual Budget (Ug shs)	Cum. Receipt ( Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Farm improvements (bush cleared, banana plantation established, 20 cows procured, paddocking done, spray race renovated, water system improved, workers paid) undertaken on Mr. Kanunura's farm in Bushenyi district (number of activities)	470,000,000	470,000,000	7.00	5.74	1.43
Irrigation dam excavated on Mr. Eituno farm in Soroti district (number)	167,000,000	167,000,000	1.00	1.00	0.62
20 Fish cages, 20 fish nets, 1200 ropes procured and installed by Lake Victoria Precious Fish Ltd in Mukono district (number of items)	500,000,000	400,000,000	1,240.00	1,240.00	1.85
Agricultural infrastructure, poultry, apiculture established and motorcycle procured by M/S Jovah International Limited in Masaka district (number of investment projects)	230,000,000	230,000,000	8.00	6.00	0.64
Grain traded, administration block, 4 foundation bases for silos built by Birya United Agencies in Mbarara district (number of investments)	2,200,000,000	2,200,000,000	6.00	4.00	5.44
Total	26,973,662,000	22,183,662,000			
Programme Performance					85.23%

Source: Field findings

## 3.2.4 Challenges

- i) Inadequate publicity of the ACF by the commercial banks that limit access in preference for disbursing their commercial loans.
- ii) Loss of profitability of businesses due to late access to loans, after a lengthy loan processing period ranging between two to nine months in some areas. The access requirements were noted to be too many and prohibiting loan applications from farmers.
- iii) Low production and vulnerability of crop enterprises to pests and diseases due to extreme climate conditions and low access to extension services

### 3.2.5 Recommendations

- i) The BoU should guide and supervise the commercial banks to establish an ACF information/help desk for the public in their banking halls
- ii) The BoU and commercial banks should continue to improve efficiency, simplicity in access requirements and timeliness in loan processing
- iii) The BoU should establish a collaborative arrangement with MAAIF and LGs to provide extension services to ACF farmers.

# 3.3 Cotton Development Organisation

#### 3.3.1 Introduction

The Cotton Development Organization (CDO) Vote 155 is mandated to monitor the production, processing and marketing of high value cotton and its by-products. The CDO has one programme Cotton Development and two sub-programmes 01 Headquarters and Project 1219 Cotton Production Improvement. The strategic objective of the cotton development programme is to increase cotton production and quality with the aim of contributing to the national economy through increased incomes. The intended outcome is increased cotton production, quality and domestic value addition.

#### **Cotton Development Programme**

The approved budget for Cotton Development Programme in FY 2019/20, excluding arrears is Ug shs 8.642 billion, of which Ug shs 4.179 billion (48.36%) was released and Ug shs 3.157 billion (75.55%) spent by 31<sup>st</sup> December 2019. This was good release and expenditure performance. The areas that were sampled for monitoring under the two sub-programmes are presented in Annex 1.

# 3.3.2 Headquarters

## Background

Within this sub-programme, the CDO provides services to 67 cotton growing districts in the following regions: West Nile, Western, Mid-West, Lango, East Acholi, West Acholi, Bugisu /Teso, Pallisa, Pader Project, Tororo, Busoga. The CDO collaborates with Uganda Ginners and Cotton Exports Association (UGCEA) to procure, process and distribute cotton seeds and inputs (pesticides, herbicides, spray pumps, tractor hire services) to farmers.

The quantity of cotton produced increased from 110,707 bales (@185kg) in FY 2015/16 to 189,444 in



FY 2018/19; the proportion of lint classed in the top three grades improved from 66% to 84%, while the volume of cotton consumed locally increased from 5,930 bales to 8,548 bales over the same period. The approved budget for Headquarters sub-programme for FY 2019/20 is Ug shs 4.43 billion, of which Ug shs 2.315 billion (52.25%) was released and Ug shs 2.261 billion (97.67%) spent by 31st December 2019. This was very good release and expenditure performance for this sub-programme.

#### Performance

By 31st December 2019, the following inputs were distributed to farmers and seed growers in the cotton growing areas: 3,137 metric tonnes (Mt) of seed; 35 Mt of foundation seed; 582 Mt fertilizers; 1,701,275 one acre units of pesticides; 5,564 spray pumps and 4,484 liters of herbicides. A total of 4,000 one acre demonstrations plots were established for training farmers; 9,500 acres were planted under seed multiplication out of which 4,000 acres were established on Prison Farms. A total of 1,121 acres were ploughed using tractors in the 67 cotton growing districts; and 450 UGCEA extension workers were deployed to support the farmers.

Climate related challenges affected cotton production in many parts of the country. For example, in West Acholi sub-region, the crop failed due to too much rains that washed away the pesticides and herbicides leading to high prevalence of weeds, pests and diseases. In the West Nile sub-region, the survival rate of cotton was estimated at an average of 40% and the yields were low due to drought, floods, pests and diseases, inadequate supply of pesticides and late distribution of inputs by CDO.

For example, Mr. Kubirira Anthony of Nyarugal Lower Village, Parwo Parish, Parambo Sub-county, Nebbi District procured from CDO 75 bags of seed, 60 bags of fertilizer, 30 units of herbicides, 12 matabi spray pumps and established 32 acres of cotton in 2019/20. The farmer harvested 19 tons of seed cotton which was lower than expected. The crop survival rate was lower (70%) due to heavy rains, drought and pests and diseases.

In the Mid-western and Central region, the crop survival rate was low estimated at 60% due to heavy rains and floods that affected germination and harvests and late planting as farmers lacked tractors for timely ploughing. Most tractors in the region were dilapidated and needed replacement. The most affected areas were Kabwooya sub-county and Baseruka sub-county in Hoima District, and Butyaba and Bullisa subcounties in Bullisa District.



Old non-functional CDO tractors parked at CDO regional office in Kisita Village, Northern Ward, Masindi Municipality, Masindi District

## **Challenges**

- Reduction in cotton production and quality due to: extreme/erratic weather conditions, increased incidence of weeds, pests and diseases, inadequate pesticides supplied and the collapse of the international price.
- ii) Untimely delivery of inputs; inadequate extension services; late land opening due to lack of/dilapidated tractors.

#### Recommendations

- i) The CDO should collaborate with LGs to prepare and implement a climate smart cotton growing strategy and promote disease resistant and drought tolerant cotton varieties.
- ii) The CDO and UGCEA should ensure timely provision of inputs to farmers.

## 3.3.3 Cotton Production Improvement

## **Background**

Since FY 2014/15, the CDO undertook construction a Government cotton seed processing plant on 16.5 acres of land in Akwara Village, Pajule Sub-county, Pader District. The first phase works were completed in FY 2017/18 and the second phase commenced in the same year. By 30<sup>th</sup> June 2019, the following structures had been completed since project inception: perimeter fence, guard house, ablution block, front office, ginning and delinting halls, seed bagging area, raw cotton seed store, unprocessed cotton seed store, power house, pump house, booster pump house, overhead water tanks and underground water tank.

Machinery from the old sites – Ngetta, Masindi and Kachumbala – were transferred and installed at the plant. New cotton processing machinery was procured and installed, including the weighbridge. Some planned structures were not constructed due to inadequate funding. The approved budget for the subprogramme for FY 2019/20 was Ug shs 4.211 billion, of which Ug shs 1.864 billion (44.26%) was released and 0.896 billion (48.06%) spent by 31st December 2019. This was good release and poor expenditure performance for this sub-programme.

#### **Performance**

The construction of the bale shed was 95% complete by 8th January 2020. The eight gin stands whose procurement commenced in FY 2018/19 were in shipment at Mombasa port. Three of the ten roller doors that were damaged in FY 2018/19 by storm rains were repaired. A temporary store for produce was constructed. All the installed cotton dressing machines were operational except the seed bagging machine whose spare parts had been delivered in October 2019 but had not been installed. Manual bagging, weighing and stitching was being done.





Ongoing construction of bale shed (left) and bags of dressed seed being loaded at the CDO Cotton Dressing Station in Pader District

Several structures that were planned to be implemented by phase 2 had not been constructed due to inadequate funding. These were: three stores; multi-purpose hall and offices; dining hall; kitchen and canteen; staff accommodation; mechanical workshop; and external works (drive ways, landscaping, drainage).

The dressing station was incurring higher costs of processing cotton seed due to the poor quality of raw materials delivered by the ginneries, a problem that was associated with the heavy rains. Whereas the station expected cotton seed with a moisture content of less than 7%, the cotton seed that was received was of 15% - 18% moisture content. This affected the machines and slowed the rate of production of the final products. About 40% - 45% of the fuzzy seed was not viable.

## **Overall Performance of the Cotton Development Programme**

The overall semi-annual performance of the Cotton Development Programme during FY 2019/20 was good rated at 79.65% (Table 3.4). Farmers and seed growers were trained, demonstration plots established and cotton planted in various parts of the country.

Table 3.4: Performance of the Cotton Development Programme by 31st December 2019

Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Output: 02 Seed multiplication ( No. of Seed growers)	451,402,170	242,000,000	6,500	7,000	3.46
Output: 03 Farmer mobilisation and sensitisation for increasing cotton production and quality (No. of Demo Plots)	3,069,091,882	1,565,202,138	4,000	4,000	23.55
Output: 04 Cotton targeted extension services (No. of extension workers)	198,500,000	113,200,000	400	450	1.52

Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)		
Output: 06 Mechanisation of land opening (No. Of districts)	57,000,000	42,500,000	67	67	0.44		
Output: 72 Government Buildings and Administrative Infrastructure (No. of constructions)	3,611,000,000	1,349,050,000	7	1	10.59		
Output: 77 Purchase of Specialised Machinery & Equipment (No. of delinting machines)	600,000,000	515,000,000	1	0	2.15		
Output 05: Provision of pumps - motorised (Number)	142,800,000	64,400,000	51	23	1.10		
Output 05: Provision of pumps - Matabi (Pieces)	154,350,000	128,550,000	3,087	2,571	1.18		
Output: 01 Provision of cotton planting seed (Bags)	1,138,955,000	1,082,587,500	455,582	433,035	8.74		
Output 05: Provision of pesticides (Units)	3,266,995,500	3,066,489,000	978,313	893,327	24.39		
Output: 02 Seed multiplication - herbicides (Litres)	67,620,000	38,640,000	4,508	2,576	0.52		
Provision of fertilizer(Kg)	262,440,000	435,120,000	3,876	7,252	2.01		
Motorcycles(Number)	12,500,000	-	5	-	0.00		
Total	13,032,654,552	-	-	-			
Programme performance	Programme performance						

Source: Field findings



#### Challenges

- i) Poor quality of cotton seed delivered by farmers and higher volumes of rejects resulting from heavy rains, high moisture content and spots in the raw cotton.
- ii) High risk of wastage of cotton seed and seed cotton due to lack of storage. There was a storage gap of 2,000 metric tonnes.
- iii) Delayed repair of machine components due to lack of a mechanical workshop on station. Some operations stalled for two weeks awaiting machine component repairs that were done in Lira District. Transporting machinery to other districts for repair increased the overhead costs.
- iv) Lower functionality and productivity of the dressing station due to frequent power blackouts and the switch gear that was damaged in August 2019 by power fluctuation. The switch gear was repaired by 31st December 2019.

#### Recommendations

- i) The CDO and UGCEA should strengthen supervision and quality assurance on farms and at the point of procurement of cotton seed from farmers
- ii) The CDO should construct additional storage for fuzzy seed and seed cotton at the dressing station.
- iii) The CDO should expedite the ongoing process of setting up a mechanical workshop at the station.
- iv) The CDO to collaborate with UMEME to provide a dedicated power line to the dressing station.

# 3.4 Dairy Development Authority

#### 3.4.1 Introduction

The Dairy Development Authority (DDA)'s mission is to provide sustainable dairy development and regulatory services for increased production, processing, marketing and consumption of milk and milk products in the country. The strategic objective of the dairy development and regulation programme is to increase production of quality and marketable milk and milk products. The planned outcome is increased production of quality and marketable milk and milk products.

## **Dairy Development and Regulation Programme**

The approved budget for Dairy Development and Regulation Programme for FY 2019/20, excluding arrears is Ug shs 10.131 billion, of which Ug shs 4.888 billion (48.24%) was released and Ug shs 2.928 billion (59.90%) spent by 31<sup>st</sup> December 2019. This was very good half year release performance and fair absorption of the resources. The areas that were sampled for monitoring under the two sub-programmes are presented in Annex 1.

## 3.4.2 Headquarters

## **Background**

The Headquarters sub-programme focuses on promoting dairy production and marketing through stakeholder training and group strengthening, provision of inputs and ensuring compliance to dairy standards and regulations. The approved recurrent budget for DDA for 2019/20 was Ug shs 6.489 billion, of which Ug shs 3.074 billion (47.37%) was released and Ug shs 2.372 billion (77.18%) spent by 31<sup>st</sup> December 2019.

#### **Performance**

By 31st December 2019, dairy stakeholders in the milk producing regions had been trained along the value chain and supported with critical farm inputs. Pasture planting materials were procured and distributed to farmers including: Centrosema seeds (691 kg); Chloris Gayana seeds (2,465kg); Lab seed (478kg); Napier cuttings (150); Callindra seeds (30kg); Potted Calliandra seedlings (2,220) and potted Bracharia seedlings (3700). Procurements were in advanced stages for 250 stainless steel milking buckets and 411 aluminium food grade milk cans.

Quality assurance and regulation was done through inspection, registration and market surveillance. Testing of milk and milk products was done to assess compliance to standards. In the Northern region, 70 milk handling premises and equipment were inspected in Kitgum, Lira, Apac and Gulu districts. Common noncompliance included keeping milk in freezer together with other beverages, delivery of milk in jerricans and lack of certificates of heath.

In the North-Eastern region, 87 premises/equipment were inspected in Mbale, Sironko, Bududa, Ngora, Kumi, Kaberamaido, Kapchorwa, Amuria and Manafwa districts; 54 premises/equipment (62.06%) were compliant to dairy standards. Out of the 50 raw milk samples analysed from Soroti and Mbale municipalities, 20 samples were adulterated with water. All the UHT milk samples analysed had some added water ranging between 7% and 18%.



 $\label{eq:massingle} \textbf{Hygiene observed at Masindi MCC in Masindi Municipality due to frequent supervision by DDA$ 

By 31st December 2019, Masindi Milk Collection Centre (MCC) located in Masindi Municipality had been inspected twice by DDA and the staff were trained in good practices in milk handling. The MCC traded in 2,000 litres per day during the dry season and 4,000 litres per day during the rainy season. The main challenge was competition of vendors who sold poor quality watery milk in jerricans at Ug shs 1,000 per litre compared to the higher price of Ug shs 1,200 per litre charged at the MCC. The need for DDA to strengthen supervision of quality of milk and its products was emphasized.



Training of farmers and other key stakeholders was conducted by DDA. In the South-Western region, 634 farmers out of the annual target of 1,100 were trained in feed production, hygienic milk handling and dairy standards in Kabale, Bushenyi, Kazo, Sheema, Kiruhura and Lyantonde districts. Small scale yoghurt processors and milk suppliers and buyers were trained with support from SNV-TIDE project. Market surveillance was also funded by SNV-TIDE project.

### Challenges

- i) Low outreach of DDA services due to inadequate staff and vehicles and budget cuts. It was difficult for the three staff in the Northern region to reach all the 17 districts. Most work was done in four districts; similarly, three staff in the North-Eastern region were only able to deliver services at a level of 45% in their allocated 27 districts.
- ii) In Bugisu and Teso regions, trade in milk and its products was low and the Milk Collection Centres (MCCs) were not functional due to the quarantine imposed since March 2019 as a result of the high prevalence of Foot and Mouth Disease; and low productivity of animals as most were local breeds.
- iii) Low production and productivity of animals due to predominance of local breeds on most farms in Uganda.

#### Recommendations

- i) The DDA should prioritize increasing staffing at the regional level.
- ii) The MAAIF should strengthen routine surveillance and animal vaccination to prevent livestock disease epidemics.
- iii) The DDA should collaborate with NAGRC&DB, MAAIF and LGs to promote improved animal breeds and artificial insemination technologies at farm level.

## 3.4.3 Dairy Market Access and Value Addition

## **Background**

The Dairy Market Access and Value Addition sub-programme focuses on revival of the Entebbe Dairy Training School (EDTS), rehabilitation of Milk Collection Centres (MCCs), establishment of regional offices and accreditation of the National Dairy Laboratory. The approved development budget for DDA for 2019/20 was Ug shs 3.642 billion, of which Ug shs 1.814 billion (49.81%) was released and Ug shs 555.405 million (30.61%) spent by 31st December 2019.

#### **Performance**

Procurements were at varying stages for key dairy infrastructure and equipment such as raw milk reception tank, centrifuge pumps, chilled water unit, stainless steel water tank, air compressor, water cooling unit, electrical control panel and agitator motors. Construction of Gulu Milk Collection Centre (MCC) and DDA Northern Uganda Regional Office at Bus Park Cell, Pece Division, Gulu Minicipality, Gulu District was completed.





Gulu Milk Collection Centre (left) and DDA Northern Uganda Regional Office (right) at Bus Park Cell, Gulu Municipality in Gulu District

Draft Bills of Quantities for rehabilitation of the National Dairy Analytical Laboratory (NDAL), Entebbe Dairy Training School (EDTS), and Kitgum MCC were developed and awaiting approval; road boundaries for Kyegegwa MCC were being sorted out before contracting the works. Procurement of laboratory reagents, consumables, 40 thermometers and 40 lactometers was ongoing.

## Challenges

- i) A budget shortfall of 47.2% in Quarter 1 led to delayed initiation of procurements especially for dairy equipment, rebilitation of MCCs and Reagents. This in turn led to slow absorption of funds by 31st December 2019.
- ii) Land encroachment at Entebbe Dairy Training School (EDTS) whereby five out of the 10 available acres were sold off by Fishways Limited. The matter was in courts of law since October 2018 and yet to be concluded.

## Recommendation

i) The Uganda Land Commission and DDA should work with the courts of law to conclude the land case affecting the EDTS.

#### Overall Performance of the Dairy Development and Regulation Programme

The semi-annual performance of Dairy Development and Regulation Programme during FY 2019/20 was poor rated at 37.25% (Table 3.5). The poor performance was due to the following factors: Most procurements were still ongoing and delivery of key dairy equipment and infrastructure was expected in Q3 and Q4; there was partial achievement of outputs at the regional offices due to budget cuts, inadequate disbursed funds and low staffing.



Table 3.5: Performance of the Dairy Development and Regulation Programme by 31st December 2019

Key Outputs	Annual Output Budget (Ug shs)	Cum Receipt (Ug shs)	Annual Target	Cum. Achieved Qty	Physical performance (%)
Dairy equipment supplied (items)	547,077,855	437,662,284	16	5	5.34
Pasture planting materials supplied (3814 kg seeds and 24,500 seedlings)	168,186,000	154,236,000	28314	9734	1.58
Milk analyzer, lactometer, testing kits and laboratory reagents supplied (lots)	308,400,000	127,501,950	4	2	7.71
Dairy facilities rehabilitated -Kitgum Milk Collection Centre; National Dairy Analytical Lab; Entebbe Diary Training School Lab (number)	608,949,160	608,949,160	3	0.5	2.54
Stainless buckets, food grade milk handling utensils, food grade plungers and aluminium milk cans supplied (items)	198,046,873	192,603,000	912	673	3.76
Chaff cutters supplied (items)	95,500,000	95,500,000	16	0	0.00
Laboratory equipment supplied (lots)	615,000,000	615,000,000	1	0	0.00
Mobile Laboratory Vans procured (number)	800,000,000	800,000,000	2	0	0.00
Farmers and small scale processors trained in good dairy farming practices (number)	103,279,372	37,640,499	2928	1290	2.58
Benchmarking visits undertaken by dairy farmers	3,196,000	0	1	0	0.00
Youth and women groups supported to engage in commercial feed production (number of groups)	2,000,000	0	1	0	0.00
Formation of new groups and strengthening of old groups done (number of groups)	9,360,000	7,787,600	3	3	0.23

Milk handling premises inspected (number)	309,344,933	52,446,750	770	445	7.73
Dairy standards and regulations enforced (number of enforcement exercises)	142,503,611	38,818,300	36	15	3.56
Market surveillance and milk testing exercises undertaken (number)	84,542,061	13,110,150	26	10	2.11
Samples of milk and milk products analysed (number)	5,668,000	2,834,000	2500	967	0.11
Total	4,001,053,865	3,184,089,693			
Programme Performance					37.25%

Source: Field findings

#### **Overall Vote Performance**

Training of key stakeholders was undertaken by DDA with support of other key stakeholders such as SNV-TIDE project in South Western Uganda. Inspection of dairy premises and equipment was undertaken and the quality standards enforced. Production and productivity of milk and its products was negatively affected by the predominance of local dairy breeds at farm level and quarantine against FMD in some milk producing regions. The Vote overall performance was poor (37.25%) by 31st December 2019 as most capital procurements were yet to be concluded and regional offices partially implemented their programmes as a result of budget cuts and low disbursements from DDA Headquarters. Funds absorption was low (59.90%).

### 3.5 Local Governments

#### 3.5.1 Introduction

The Local Governments (LGs) have the responsibility for all decentralized services in the production sector including crop, animal and fisheries husbandry extension services; entomological services; and vermin control. The services are budgeted under one program the District Production Services. The overall purpose of the transfers to LGs is to support services that increase the level of production and productivity of priority agricultural commodities.

The districts receive the transfers as a Sector Conditional Grant (wage) and Sectoral Conditional Grant (Non-wage) that addresses two sub-programmes - Agricultural Extension and Production. The extension grant is intended to mobilise and organize farmers so that they benefit from advisory services. The grant is spent as follows: 25% as a development grant and 75% for recurrent operational expenses at the district and sub-county level.

The approved budget for the Local Government (LG) Production Sector in FY 2019/20 is Ug shs 122.597 billion, of which 64.813 billion (53%) was released and fully spent by 31st December 2019. This was very good release and expenditure performance. The districts that were visited are presented in Annex 1.



## **District Production Services**

#### 3.5.2 Performance

The overall performance of the District Production Services during FY 2019/20 semi-annual was good (78.38%) as shown in Table 3.6. By 31<sup>st</sup> December 2019, partial implementation was undertaken of the planned outputs. Key activities implemented in the LGs included: provision of extension services to farmers; establishment of demonstration sites; pest and disease surveillance and control; and establishment of agricultural infrastructure.

Table 3.6: Performance of the District Production Services by 31st December 2019

Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)
Procuring and distribution/ mantainance of Fish equipments (number)	3,800,000	2,500,000	4,000.00	3,000.00	0.09
Fish fry center/Fish Ponds Operationalised/ Maintained (No. of centers)	53,115,000	1,500,000	101.00	83.00	1.24
Construction/Maintance of Fish /Bees/ Dairy Demos (No. of Demos)	60,898,561	28,367,000	46.00	12.80	0.85
Training of farmers/ Farmer groups(Number of Farmers/Groups)	346,820,928	176,759,000	27,887.00	13,344.00	7.62
Maintain/Establish Irrigation schemes (No.of schemes /Kits)	299,934,000	184,717,000	18.00	6.20	3.93
Setting/Maintaining Demonstration gardens (No. of Demos Gardens)	112,627,849	51,358,849	71.00	4.10	0.33
Market assessments conducted (No.of Surveys/ visits)	46,537,014	33,762,076	60.00	30.00	0.75
Animal and crop disease surveillance (No. of visits )	234,470,397	127,887,198	3,063.00	1,200.00	3.94
District farm garden/ Plantations (No. of gardens)	91,556,000	43,127,000	49.00	31.50	2.14

Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)
Plant Clinic established and mantained (No.of clinics )	45,652,356	28,684,904	8.00	3.80	0.81
Procuring and distributing tsetse fly traps (No. of traps)	32,406,238	10,767,449	755.00	273.00	0.76
Procuring and installation of bee hives.(No. of bee hives)	65,219,518	42,198,260	596.00	150.20	0.59
Sensitisation/ Backstopping/inspection and Monitoring (No of visits)	1,006,654,578	472,743,051	4,233.00	1,901.00	22.54
Farm Agricultural inputs distributed (Number)	122,621,468	59,005,386	30,636.00	31,012.00	2.87
Slaughter slab /Market stall construction/ rehabiltation/Slab monitoring (No. of slabs)	209,460,241	87,938,000	4.00	1.90	4.90
Animal Vaccination (No. of animals vaccinated )	55,355,000	35,688,000	82,712.00	356,605.00	1.30
Vacccinaton doses Procured (Number of doses)	8,590,892	1,700,946	1,100.00	250.00	0.20
Liquid nitrogen (No. of doses)	35,602,000	15,325,000	1,250.00	355.00	0.55
Data collection (No. of visits)	88,334,944	30,673,000	351.00	120.00	2.04
Purcharse of equipment for field work (No.of equipments)	125,863,000	77,706,000	62.00	15.40	1.19
Vehicle/Motor cycle maintainance/Procurement (No.of vehicles)	419,741,488	279,270,495	129.00	57.00	6.53
Maintaining/Procurement office equipment (No.of equipment sets)	211,182,407	104,205,081	171.00	35.00	2.05
Coordinations (Quarterly meetings)	332,732,416	136,303,995	298.00	101.00	6.45



Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)
Business inspections (No. of businesses)	89,304,666	21,121,833	67.00	29.00	2.09
Market linkage services (No. enterprises)	59,053,000	16,580,000	120.00	17.00	0.70
Cooperative mobilization and outreach services (No. of cooperatives)	22,185,182	13,538,000	81.00	12.00	0.13
Tourism promotion services /Trade shows / Tours conducted (No.of faculties)	91,047,000	22,284,000	44.00	9.00	1.78
Total	4,270,766,143	-	-	-	
Programme performance	78.38%				

Source: Field findings



Slaughter slab constructed in Bugweri District with the sectoral grant

By 31st December 2019, a slaughter slab in Kikunyu Village, Idudi Parish, Buyanga Parish, Bugweri District had been reconstructed. The initial completion date was April 2018 (FY 2018/19). However the slab was effected by the harsh climatic conditions. Renovations were completed by 31st December 2019.

Key challenges for the District Production Services Programme were: Delayed implementation of the extension grant as some districts had difficulties in transitioning to the Integrated Financial Management System (IFMS) and Q1 funds were accessed in December 2019; poor accountability and reporting on

grant use by LGs; inadequate wage bill for filling the staff gaps for the extension service; slow approval of requisitions by Accounting Officers; high operational costs in hard to reach areas, especially in subcounties that are island based ie subcounties of Bukunda, Sigulu and Lolwe in Namayingo district; Lack of substantive reporting format for DLGs, too much data is always collected but lays in their files; and low technical capacity of extension workers at sub county level.

# 3.5.3 Challenges

- i) Loss of crop and animal production due to extreme weather conditions including drought, floods, hailstorms, exacerbated by the rising incidence of pests and diseases.
- ii) Non-compliance with Public Financial Management (PFM) laws and regulations delayed approval and disbursement of funds by Accounting Officers; commitment of GoU above the funds available in a financial year
- iii) Inadequate extension services due to under staffing and limited transport means for the the available staff.

#### 3.5.4 Recommendations

- i) The MAAIF and LGs should promote irrigation and mechanisation at farm level and promote dissemination of climate smart technologies.
- ii) The MFPED and MoLG should ensure compliance of LGs to PFM laws and regulations.
- iii) The MFPED, MoPS, MAAIF and LGs should prioritise recruitment and equipping more extension workers.

# 3.6 Ministry of Agriculture, Animal Industry and Fisheries

# 3.6.1 Background

The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)'s mission is to transform subsistence farming to commercial agriculture. The ministry coordinates sector interventions both at the central and local government level. The MAAIF has six programmes namely: Crop Resources; Directorate of Animal Resources; Directorate of Agricultural Extension and Skills Management; Fisheries Resources; Agriculture Infrastructure, Mechanization and Water for Agricultural Production; and Policy, Planning and Support Services. Four programmes were monitored as presented below.

## **Crop Resources Programme**

# 3.6.2 Enhancing National Food Security Through Increased Rice Production in Eastern Uganda

## Background

Implemented in Bugiri and Bugweri districts, the sub-programme aims to ensure food security through increased production of lowland rice resulting in sustainable improvement in welfare of beneficiary poor communities. The key interventions focus on water storage infrastructure for irrigation and development of land and irrigation systems. The project is jointly implemented by GoU and private sector stakeholders (Busowa Cooperative Society, Ltd. in Bugiri District and Pearl Rice Ltd in Iganga District) that play a catalytic function in the rice value chain through engagement in production, providing both a market for paddy rice and establishing/expanding high quality facilities for processing.

The project total cost is estimated at US\$ 71.16 million, of which the Islamic Development Bank (IDB) proposes to finance a total amount of US\$ 34.05 million. The approved budget for the project for FY 2019/20 is Ug shs 41.599 billion, of which Ug shs 2.24 billion (5%) was released and Ug shs 1.48 billion (65%) spent by 31st December 2019. This was poor release performance and fair resource absorption.



#### **Performance**

The overall semi-annual performance of the project during FY 2019/20 was poor (11.4%) as shown in Table 3.7. The project lagged behind schedule with the main output of establishing irrigation schemes not implemented. Activities that were implemented included organization of farmers and bringing other stakeholders on board; holding of steering committee meetings; procurement of a Financial Auditor; provision of office furniture and IT equipment; and initiation of the procurement process for vehicles.

Table 3.7: Performance of Enhancing National Food Security through Increased Rice Production in Eastern Uganda by 31st December 2019

Output	Annual Budget (Ug shs 000')	Cum. Receipt (Ug shs 000')	Annual Target	Cum. Achieved Qty	Physical performance Score (%)	Remarks
Policies, Laws, guidelines, Plans and Strategies prepared (No .of staff involved)	200,000	200,000	10.00	10.00	100.00	Additional salary for promotion of production and productivity of priority commodities
Promotion of Production & Productivity of Priority Commodities undertaken (number of quarters)	4,555,000	2,041,371	4.00	2.00	100.00	Trainings were conducted, Mobilization and sensitization of farmers undertaken, meetings were conducted.
Irrigation schemes constructed (number)	36,844,083	0	2.00	0	0	Money was not released due to ongoing procurement process; consultants for detailed designs were not yet recruited.
Total	41,599,083	2,241,371				
Programme Perf	ormance				11.4%	

Source: Field findings; IFMS and MAAIF data

In Bugiri and Bugweri districts, work plans were developed in conjunction with the implementing partner and the district project committees were functional. However, planned outputs were not delivered as funds had not been released.

# **Challenges**

- i) The project had a significant time lapse as the implementation was supposed to have been completed during 2014-2018. Challenges of multiple levels of approvals that are needed to be secured prior to proceeding with any procurement process delayed project start.
- ii) Continuous expenditure of Government counterpart funds on a project that has not been meeting its objectives since 2014. A total of Ug shs 240m was spent by 31st December 2019.
- iii) Project left out other rice producing areas in the Busoga sub-region, Teso and Lango that are part of the rice producing belt. This was likely to bring out unbalanced growth in the sub-region.

#### Recommendations

- i) The MFPED, MAAIF and implementing partners should review and remove bottlenecks to speedy implementation of the project.
- ii) The MAAIF should accelerate plans to implement and rollout the best practices to other areas in Eastern Uganda.

# 3.6.3 National Oil Palm Programme

# **Background**

The National Oil Palm Programme (NOPP) is a Government intervention whose development objective is to sustainably increase rural incomes through opportunities generated by the establishment of an efficient oil palm industry that complies with modern environmental and social standards. The 10 year programme (29th November 2018 to 26th August 2028) is financed through a loan agreement between GoU and the International Fund for Agricultural Development (IFAD) amounting to US\$ 75.820 million with a grant element equivalent to US\$ 1.210 million<sup>3</sup>.

The project has three components, namely: i) Scaling up smallholder oil palm development; ii) Livelihoods diversification and resilience; and iii) Oil palm sector development framework. The project will concentrate its activities in four hubs in Buvuma Island, Mayuge, Masaka/Rakai, Mukono/Buikwe and address spillover activities in Kalangala District. In all new "hubs", investment will be dependent on a firm commitment by the private sector to invest in the CPO mill to process the local supply.

The approved budget for the NOPP for FY 2019/20 is Ug shs 68.247 billion, of which Ug shs 57.650 billion shall be contributed as external financing and Ug shs 10.597 billion by GoU. By 31st December 2019, Ug shs 6.272 billion (59%) of the GoU contribution was released and Ug shs 2.086 billion (33%) spent. This was very good release and poor expenditure performance for GoU counterpart funding. The IFAD released US\$ 5.7 million, of which Ug shs 2.4 billion was spent.

<sup>3</sup> IFAD and GoU, 2017.



#### **Performance**

The performance of the National Oil Palm Programme during FY 2019/20 semi-annual was poor (36.18%). Most planned outputs were not achieved as the programme processes of activating the project accounts were ongoing. The project cleared encumbrances on land in Buvuma District and the nursery for the seedlings was demarcated. The survey map for the oil palm estate in Buvuma was produced. Most procurements were in initial phases for the M&E system, Environmental Social Impact Assessments, consultant to undertake the needs assessment study on the alternative livelihoods and construction of fertilizer stores.

Table 3.8: Performance of the National Oil Palm Programme by 31st December 2019

Annual						
Output	Annual Output Budget ( Ug shs)	Cumulative receipts	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)	
1000 hectares of land for oil palm nucleus estate in Buvuma cleared of all encumbrances, boundary roads constructed, all acquired land demarcated and land survey map produced (number of interventions)	8,002,033,000	6,250,000,000	4	1.5	8.50	
NOPP results, M&E system designed, appropriate materials done, EIAs carried out and agronomy brochures produced (number of interventions)	7,075,000,000	4,174,250,000	4	1	6.63	
Alternative livelihoods introduced, environmentally sensitive areas demarcated, oil palm trials maintained, land preparation of 400 hectares started, physical planning done, updated maps produced (number of interventions)	6,000,000,000	3,540,000,000	6	1.5	5.62	

Office block and two fertiliser stores constructed (number)	1,140,000,000	661,200,000	3	1	1.45			
Construction of 3 landing sites in Kalangala, Buvuma and Buikwe districts, 25km of access roads and 75km of farm roads in Buvuma district (number of interventions)	22,000,000,000	12,760,000,000	3	0.5	13.98			
Community sensitization done, 75,000 oil palm seedlings availed, 5 small holder farmer units established and one hub started (number of interventions)	1,003,954,000	582,293,320	4	0	0.00			
Total	45,220,987,000	27,967,743,320						
Programme performance	Programme performance							

Source: Field findings; MAAIF Q2 Progress Report FY 2019/20

# Challenges

- i) Poor implementation of the project due to delayed activation of dormant project accounts; the donors were still reviewing the 2019/20 work plan by October 2019.
- ii) Delayed payment of staff salaries for months.

## Recommendation

i) The MAAIF should expedite the activation of the project accounts and ensure that key planned outputs are implemented.

# 3.6.4 Uganda Multi-Sectoral Food Safety and Nutrition Project

## **Background**

The Uganda Multi-Sectoral Food Safety and Nutrition Project (UMFSNP) aims to increase production and consumption of micronutrient-rich foods and utilization of community based nutrition services in smalholder households in project areas. The project is funded by a US\$ 27.64 million grant from the Global Agriculture and Food Security Programme (GAFSP) Trust Fund supervised by the World Bank; it was to be implemented from 1<sup>st</sup> July 2015 to 31<sup>st</sup> December 2019<sup>4</sup>. The project was granted a one year no cost extension up to 31<sup>st</sup> December 2020.

<sup>4</sup> World Bank, 2014.



Project implementation was phased starting with five districts in July 2016 (Bushenyi, Ntungamo, Maracha, Nebbi, Namutumba); five districts in February 2017 (Isingiro, Kasese, Kabarole, Kyenjojo, Kabale) and five districts in July 2017 (Bugiri, Iganga, Arua, Kiryandongo, Yumbe). An additional four districts were added arising from the redistricting process (Rukiga, Bunyangabo, Pakwach and Bugweri) bringing the total beneficiary districts to 19. The funds of the new districts are managed through the parent/original districts.

The approved budget for the project during FY 2019/20 is Ug shs 23.325 billion, of which Ug shs 23.070 billion is grant financing and Ug shs 255 million is GoU counterpart funding. By 31st December 2019, Ug shs 13.066 billion (55.91%) was released and Ug shs 12.803 billion (97.98%) spent. This was very good release and expenditure performance.

#### **Performance**

Cumulatively since project inception up to December 2019, a total of US\$ 19.684 million (81.17%) of the grant was disbursed. Overall performance was: 1,500 primary schools were offering a package of nutrition demonstration activities in project areas; realised 56,663 increase in the quantity of seed/planting materials of selected micronutrient rich crops multiplied or produced by lead farmers in project areas; 88,005 farmers were accessing multiplied or produced micronutrient rich seed/planting materials in project areas; 121,587 of girls (primary 4 and above) received weekly iron folic acid supplements through primary schools in project areas; 565,464 people received improved nutrition services; and 6,081 cooking demonstrations were carried out at community level (MAAIF, 2019a).

Community sensitization meetings were conducted for 200 parent group chairpersons, 200 lead farmers, 100 village health teams (VHTs) and 100 lead farmers in each of the 15 project districts.

Eleven out of 19 project implementing districts were monitored and the detailed findings are summarised below. The overall semi-annual performance of the UMFSNP during FY 2019/20 was fair (55.29%) as shown in Table 3.9.

Table 3.9: Performance of the Uganda Multisectoral Food Safety and Nutrition Project by 31st December 2019

Output	Annual Ouput Budget (Ug shs)	Cumulative receipts per output	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical Performance Score (%)
Project activities implemented by schools (number of schools)	3,216,788,623	3,216,788,623	742	357	32.64
District level activities implemented (number of activities)	985,915,235	983,915,235	157	85	11.28
Community sensitization meetings held (number)	539,231,000	170,000,000	15	15	11.37
Total	4,741,934,858	4,370,703,858			
Programme performance				55.29%	

Source: Field findings

All the implementing districts received the project funds. However, fund utilisation was low due to three key reasons: a) delayed disbursements; b) the cash limit advisory from MAAIF was received in December 2019 or January 2020; c) lengthy approvals at district level where by the funds were transferred from project accounts to district accounts by December. In Iganga and Bugweri districts, the funds received in May 2019 for use in FY 2019/20 were returned to the Consolidated Fund for fear of court bailiffs garnishing the funds due to many court cases. The districts opted to differ planned activities to Q3 and Q4.





Project demonstration gardens at St. Mary's Kaihura Primary School in Kaihura village Butiiti subcounty Kyenjojo district (left) and St. Peters Primary School Nyakasanga in Umoja village Kasese Municipality Kasese District (right)

Key activities implemented at district, school and community level mainly using balances from FY 2018/19 or borrowed funds included setting up new and maintaining existing demonstration gardens; school based nutrition education for students and Parent Groups; holding community meetings to sensitize them about nutrition good practices and cookery demonstrations; and project monitoring and supervision.

Some districts faced unique challenges in implementation: In Kiryandongo, poor coordination was noted as the stakeholders did not prioritise the MAAIF interventions. The District Nutrition Action Plan, through which this project would be prioritised, was still in draft form. In Kyenjojo District, demonstration gardens were destroyed by dry spells as there were no irrigation facilities in schools. Newly created districts such as Pakwach and Bugweri faced challenges of accessing funds from the parent districts due to unconcluded MoUs by MAAIF. Maracha District had closed the project account and hence funds disbursed by MAAIF bounced back.

Generally, head teachers had capacity gaps in procurement and financial management; many reported late or not at all; others did not follow the procurement processes and many did not have records of the transactions. District lacked information on how the schools had utilised the fund. There was delayed implementation of planned activities due to poor coordination between the implementing departments (Production, Education, Health and Community Services) and the communities; absentism of head teachers; and untimely payment of community facilitators.

## **Challenges**

i) Low utilisation of funds sent for district activities on project designated accounts that were in contradiction with the Public Financial Management Act. The slow transfer of funds from the project accounts to TSA before utilisation constrained project implementation in most districts.



- ii) Partial implementation of project activities due to delayed and intermittent disbursement of funds in November and December.
- iii) Poor monitoring and evaluation system for the project; limited reporting by schools about performance.
- iv) Inadequate capacity at school level for record keeping and complying with procurement and financial management guidelines.

#### Recommendations

- i) The MAAIF and partners should review and amend the MoU so that funds for the district are disbursed directly to the District Collection Accounts.
- ii) The MAAIF should ensure timely disbursement of funds to the districts and schools. The MFPED should ensure compliance of implementing ministries to the Public Financial Management (PFM) rules.
- iii) The MAAIF should strengthen capacity of key stakeholders in monitoring and reporting, procurement and financial management.

## Directorate of Agricultural Extension and Skills Management

# 3.6.5 Department of Agricultural Extension and Skills Management

# **Background**

The Department of Agricultural Extension and Skills Management (DAES), within the framework of the MAAIF National Agricultural Extension Policy (NAEP) and National Agricultural Extension Strategy (NAES) 2016, is mandated to support and guide Local Governments in planning and budgeting for extension services; set standards for service delivery; provide agricultural production information to MAAIF; and monitor and evaluate agricultural extension services in order to strengthen accountability and transparency in agricultural extension service delivery.

The approved budget for the DAES sub-programme for FY 2019/20 is Ug shs 0.795 billion, of which Ug shs 0.307 billion (38.67 %) was released and Ug shs 0.064 billion (20.87%) spent by 31st December 2019. This was good half year release performance and poor resource absorption. The areas sampled for monitoring under this sub-programme are presented in Annex 1.

#### Performance

The performance of the Department of Agricultural Extension and Skills Management in FY2019/20 was poor rated at 47.74% (Table 3.10). By 31<sup>st</sup> December 2009, the Department had accessed Q1 funds. The Accounting Officer and other managers responsible for approval of requisitions that were submitted from the Department were often absent leading to delayed approvals (on average one month) and access to funds. Requisitions for Q2 funds were being handled for utilization during Q3 and Q4.

Table 3.10: Performance of the Department of Agricultural Extension and Skills Management by 31st December 2019

Output	Annual Budget ( Ug shs)	Cum. Receipts (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)
Output: 01 Strategies, Policies, Plans and guidelines: Agricultural extension training manuals for priority commodities developed and disseminated (No. of activities)	295,895,000	152,947,500	3	0.8	19.20
Output: 02 Administration, HRD, and Accounting - Extension service delivery in the DLGs by public and private providers supervised in all the regions (No. of activities)	59,080,000	37,000,000	5	2	4.75
Output: 03 Agricultural extension co-ordination strengthened -Linkages with private sector, research and training institutions, strengthened. (No. of activities)	324,000,000	92,500,000	6	1	23.79
Office equipment/Vehicle maintenance (Number)	116,000,000	25,000,000	5	0	0.00
Total	794,975,000	307,447,500			
Programme performance					47.74%

Source: Field findings

Agricultural Extension training materials were disseminated to 28 DLGs of Zombo, Packwach, Arua, Alebtong, Kole, Lira, Oyam, Kapchorwa, Kaliro, Iganga and Luuka districts among others; Supervision and technical backstopping of extension service providers was undertaken in 14 districts of Tororo, Butaleja, Budaka, Pallisa, Kagadi, Kibaale, Hoima, Kayunga, Mukono, Wakiso, Mityana, Kyegegwa, Kyenjojo and Kabarole; review and supervision meetings for performance of DLG Extension staff were conducted in 12 districts of Dokolo, Amolator, Apac, Lubirizi, Sheema, Kween, Bukwo, Kumi, Nakaseke, Kiryandongo and Nakasongola; and a benchmark study tour to western Kenya was conducted.

Extension service delivery at the LG level was coordinated by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). The MAAIF undertook compliance monitoring, supervision and backstopping of the LG Production Departments and provided a compliance tool, the Agricultural Extension Diary. The E-Diary was still under development by 31st December 2019. The key outputs for extension service delivery were agreed with the LGs.



# Challenges

- i) Non-compliance by some LGs in using disbursed resources for planned activities and reporting performance in time. Problematic districts reported by MAAIF by issue included: Diversion of vehicles and motorcycles from the Production Departments to politicians Kapchorwa, Kabarole, Kasese; poor reporting Iganga, Kabarole, Kasese, Mukono, Wakiso, Nwoya, Amuru, Kabale, Sironko, Oyam, Masindi and Kween.
- ii) Low oversight and supervision by MAAIF to enforce compliance by LGs due to delayed disbursements, inadequate budget and delayed enactment of the National Agricultural Extension Bill.
- iii) Inadequate farmer access to extension services due to stagnation in recruitments and the operational budget for three consecutive years. The programme was still operating the FY 2017/18 budget that was approved for 2,792 extension workers whereas the number had increased to 3,800.

#### Recommendations

- i) The MFPED and MAAIF should improve oversight and compliance of LGs to PFM rules and regulations.
- ii) The MFPED and MAAIF should review and revise the budget ceiling for extension services to cater for the increased staff recruitments and their operational expenses at the LG level.

# 3.6.6 Department of Agricultural Investment and Enterprise Development

# **Background**

The Department of Agricultural Investment and Enterprise Development (DAIED) has the overall objective of supporting sustainable agribusiness development and management, public and private sector investments and emerging commercially viable agricultural enterprise for improved food security and household income. Key interventions focus on capacity building of key stakeholders in agri-business and group dynamics; provision of post-harvest handling equipment and promotion of commodity multistakeholder platforms.

The approved budget for the DAIED for FY 2019/20 is Ug shs 1.86 billion, of which Ug shs 0.87 billion (46.6 %) was released and Ug shs 0.70 billion (37.5 %) spent by 31st December 2019. This was very good release performance and poor resource absorption. Monitored areas are presented in Annex 1.

#### **Performance**

The performance of the DAIED in FY2019/20 semi-annual was good (76.68%) as presented in Table 3.11. The MoU with the private sector for joint ventures on value addition and processing infrastructure was signed and was at implementation level. The implementation sites for the proposed agro-processing and value addition project were verified in Gulu, Arua and Lira districts.

Table 3.11: Performance of the Department of Agricultural Investment and Enterprise Development by 31st December 2019

by 51" December 201					4)	
Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Output: 01 Strategies, Policies, Plans and guidelines: Agricultural investment and enterprise development promoted (No. of activities)	1,323,267,664	655,633,832	5	5.00	71.21	The exercise was conducted in the districts of Luwero and Nakaseke with support of the Food and Agricultural Organisation (FAO)
Output: 03 Agricultural extension co-ordination strengthened Enhanced institutional capacity to facilitate scaling up of agricultural commercialization (No. of activities)	101,682,000	34,490,534	3	3.00	5.47	Conducted training and sensitization of farmers in Mid-western Uganda in upscaling to the commercialized Agriculture. Conducted training of value chain actors in Agribusiness skills, value addition and post-harvest management in Eastern Uganda.
Output: 05 Provision of Value Addition extension services; Support activities of the Agriculture Investment Centre	433,399,998	175,000,000	1	1.00	0.00	Conducted the cost benefit analysis of livestock (beef, dairy, poultry and piggery) to facilitate the production of guides for these enterprises.
Total	1,858,349,662	865,124,366				
Programme performa	nce				76.68%	

Source: Field findings

The profiling and mapping exercise was done for purposes of supporting cottage industries to streamline their operations and improve the quality of their products through linking them to the Uganda National Bureau of Standards (UNBS). The UNBS will provide guidance for growing these industries to medium and eventually to large scale status.



The promotion of agricultural business and enterprise development conducted in Luwero and Nakaseke focused on improving value addition in dairy, maize, coffee, fruits and vegetable value chains. The exercise targeted youth and women groups. The cost benefit analysis was conducted in Mukono, Wakiso, Kampala, Nakaseke, Luwero, Mubende and Kiboga to cover small, medium and large scale interventions.

# **Challenges**

- i) Limited office space for the staff.
- ii) Budget cuts that limited data collection on agribusiness and value addition activities country wide.
- iii) Limited equipment used in executing field activities.

#### Recommendations

- i) The MAAIF should consider provision of office space to staff to enable a good working environment.
- ii) The MAAIF should prioritize increased allocations to agri-business and value addition development activities.

# **Directorate of Animal Resources Programme**

# 3.6.7 Northern Uganda Farmers Livelihood Improvement Project

# **Background**

The Northern Uganda Farmers Livelihood Improvement (NUFLIP) Project is a five year (November 2015 – November 2020) intervention that is financed by Japanese International Cooperation Agency (JICA) grant amounting Ug shs 13.250 billion and GoU funding totaling Ug shs 3.975 billion. The project objective is to establish an effective agriculture extension system based on a market oriented Livelihood Improvement Approach to improve farmers' livelihoods in the Acholi sub-region.

The project enhances knowledge and skills of farmers and extension service providers in vegetable production for the market. The stakeholders undertake market surveys to select commercially viable vegetables after which they are trained on the agronomy of the selected commodities by GoU and JICA experts. The project started in 2017 in three pilot districts (Gulu, Kitgum and Pader). In 2018/19, it was rolled to five additional districts (Amuru, Nwoya, Omoro, Agago, and Lamwo). The project is implemented in four sub-counties within each district and targets two to four groups in each sub-county.

The approved budget for the NUFLIP in FY 2019/20 is Ug shs 3.650 billion, of which Ug shs 3.340 billion was to be contributed by JICA and Ug shs 310 million by GoU. By 31st December 2019, the GoU had released Ug shs 107 million (34%), of which Ug shs 47.500 million (44%) was spent. This was good release and poor absorption. For donor finances, Ug shs 734.56 million (21.9%) was spent by JICA. Comprehensive information on donor financing was not readily availed. The districts that were monitored are presented in Annex 1.

#### **Performance**

The semi-annual performance of the NUFLIP during FY 2019/20 was very good (100%) as all planned activities were implemented. The main activities undertaken were training of national and district staff and farmers, market surveys, setting up of vegetable and fruit demonstrations at farm level and planting horticultural gardens.

Table 3.12: Performance of the Northern Uganda Farmers Livelihood Improvement Project by 31st December 2019

Output	Annual Budget (Ug shs 000')	Cum. Receipt (Ug shs 000')	Annual Target	Cum. Achieved Qty	Physical performance Score (%)	Remark
Skills and knowledge on market oriented agricultural production built in Acholi sub-region( No. of staff)	1,223,399	295,434	46.00	25.00	100	29 local agro input retailers from all the 8 districts of Acholi-sub region were trained on proper vegetable handling, 6 district agricultural staff and 12 sub-county supervised.
Production and productivity of vegetables in Nwoya, Amuru, Omoro, Agago and Lamwo districts (No. of acreage)	1,262,069	274,481	45.00	38.00	100	Trained farmer groups (643 farmers) in the 5 new districts. Conducted irrigation trials of pumpfurrow, pump-sprinkler and treadle hand for dry season production in Gulu District. Production realised in first season.
Nutrition status of participating households especially children (No. of farmer groups)	1,163,531	271,647	30.00	18.00	100	Conducted training on food and hygiene for 20 farmer groups (643 farmers) of the third batch from Omoro, Nwoya Amuru, Agago and Lamwo. Households were still continuing to consume vegetables beyond the project intervention.
Total	3,649,411	841,562				
Programme Perfor	mance				100%	

Source: Field findings



Amuria District: They started work with 2 groups (Tim Kica Farmers Group in Obbo Parish) and (Legatek Farmers Group in Guraging Parish) in 2018 up to 2019 November; the 2 groups graduated in November 2019. Each group benefitted from 15 training sessions before accessing fertilisers, watering cans, chemicals and seeds from JICA. The first group was given tomatoes, and green paper, while the second group received tomatoes and cabbages. A third group was enrolled (Ribbe Ber Youth Group in Palema Parish) and trained. The group members had their own activities at individual level. Trainings were constrained by low turn up of farmers due to long distances and lack of allowances.



Purber Farmers Group in Kona Ward Village, Paicho Subcounty, Gulu District with the produce from the NUFLIP supported gardens

Gulu District: Since July 2019, the project trained on vegetable production. Vegetable seeds (tomatoes, boo vegetables, okra and green pepper) were provided to the community. Unreliable rains, dry spells and high prevalence of diseases led to a high crop mortality rate ranging between 60% and 100%. With the phasing of project support, farmer turn up for trainings under the group arrangement was low. The farmers continued to reinvest the proceeds from the project support in expanding their gardens.

**Nwoya District:** The project supported farmers from July–December 2019. All groups were trained on how to cultivate vegetables and plots were set up for the first and second season. They were awarded with certificates after training. Farmers received inputs such as seeds and fertilizer, pesticides, insecticides, spray pumps, and watering cans. Inputs distributed to farmers were noted to be of good quality and all still in use. However in some subgroups, the tomatoes were negatively affected by pests and diseases and too much rain which washed away the sprayed chemicals on the crops they had planted.

**Omoro District**: A planning meeting was held in October-November 2019 with JICA aimed at strategic planning for NUFLIP. Two farmer groups started in 2018/19 in Koro (Anga Makonya Farmers Group) and Bobi (Mon Roc Farmers Groups) sub-county and continued implementing in FY 2019/20. Groups were trained and participated on enterprise development for cabbage, water melon and tomatoes. In the next season, small subgroups were formed and provided with demonstrative materials by JICA. In July 2019, two additional groups were selected to participate in the project and provided with inputs. However, the seeds provided by JICA were of poor quality with low viability.

# Challenges

- i) Unreliable weather patterns that led to 60%-100% damages to the crops.
- ii) Infrequent support to farmers in terms of extension advice against pests and diseases and technical backstopping and supervision.
- iii) Difficulty in assessing project performance due to non-availability of comprehensive donor numbers and poor data management in the implementing districts.

#### Recommendations

- i) The MAAIF and LGs should promote climate smart agricultural technologies and appropriate irrigation technologies.
- ii) The MAAIF and LGs should strengthen the extension service and ensure that it is available and accessible to all categories of farmers.
- iii) The MFPED should collaborate with MAAIF and agencies to improve availability of data on donor financing.

## 3.6.8 Regional Pastoral Livelihood Improvement Project

### Background

The Regional Pastoral Livelihood Improvement Project (RPLRP) aims to enhance livelihood resilience of pastoral communities in cross border prone areas (Uganda, Kenya andEthiopia) and build capacity of the Government to respond promptly and effectively to emergencies such as drought and animal disease epidemics. The project is funded throughan International Development Association (IDA) loan amounting to US\$ 40 million for Uganda for the period 30<sup>th</sup> June 2014 to 31<sup>st</sup> December 2019<sup>5</sup>.

The project became effective two years later in 2016 due to delayed loan approval processes and is implemented in 14 districts: Kabong, Kotido, Abim, Moroto, Nakapiripirit, Napak, Amudat, Kween, Bukedea, Kumi, Amuria, Katakwi, Nabilatuk and Kapelebyong. The project focuses on:

a) Natural resource management; b) Market access and trade; c) Livelihood support; d) Early warning and disaster response; and e) Knowledge management and research. MAAIF indicated that the project had an extension to March 2021.

The approved budget for the RPLRP is Ug shs 58.432 billion, of which Ug shs 42.255 billion (72.31%) was released and Ug shs 23.717 billion (56.12%) spent by 31st December 2019. This was very good release and fair expenditure performance. The districts that were monitored are presented in Annex 1.

#### Performance

The performance of the RPLRP during FY 2019/20 semi-annual was very good (99.05%) as all the planned infrastructure where completed or under construction as shown in Table 3.13.

<sup>5</sup> World Bank, 2014.



Table 3.13: Performance of the Regional Pastoral Livelihood Improvement Project by 31st December 2019

put	Annual Output Budget (Ug shs)	Cumulative receipts per output (Ug shs)	ual get	Cum. Achieved Quantity	Physical performance Score (%)
Output	Ann Bud	Cur rece outj	Annual Target	Cur	Phy perf Sco
Infrastructures for water resources constructed (4 dams and 8 valley tanks)	21,566,500,000	10,716,000,000	12	7.2	34.58
Rangelands and ecosystems with transboundary implications rehabilitated (hectares)	236,050,000	161,050,000	100	48	0.27
Conflict prevention, management and resolution strategies and approaches harmonized (meetings)	238,240,000	119,120,000	4	3	0.38
Market infrastructure constructed - 12 markets, 12 slaughter sheds, 3 auction grounds, 3 check points (number)	39,000,000,000	28,000,000,000	30	25.5	62.53
Crushes constructed (number)	527,250,000	527,250,000	72	72	0.85
10 sets of forage harvesting equipment and 20 groups trained (number of interventions)	520,000,000	520,000,000	2	0	0.00
Early warning systems operationalised (number of activities)	281,720,000	165,760,000	3	1.8	0.45
Total	62,369,760,000*	40,209,180,000			
Programme performance					99.05%

<sup>\*</sup>Includes multi-year cost of infrastructure.

Source: Field findings

Works for infrastructure for four dams and eight valley tanks were at various levels of completion (45%

- 95%) in the project areas. Most dams lacked ponds, troughs/reservoirs and solar powered pumps to enable drawing water out for livestock use

Some of the livestock watering infrastructure were still at contracting stage for Katakwi, Kotido, Moroto and Amudat districts. Environmental Impact Assessments (EIAs) were done in all sites and Water User Committees were trained by the National Environment Management Authority (NEMA).

Communities trained to set up and manage 48 ha of rehabilitated rangelands. Two pasture seed banks were established. The



Completed Onganyakonye valley dam in nganyakonye Village, Amaseniko Parish, Kapelebyong District

activities were slowed down by prolonged rains. Marketing infrastructure including livestock markets, slaughter sheds and cattle crushes were at varying stages of construction. The completion rates ranged between 80% to 100%.





L-R: Completed slaughter shed but with flooded courtyards in Katakwi Town Council in Katakwi District; Completed cattle market in Akore Town Board, Akoromit sub-county in Kabelebyong District

Some districts faced unique challenges: In Amuria, construction works were slow and the contractors abandoned the sites at times. The district was not involved by MAAIF in the contracting process, did not have key bid documents and hence could not supervise the contractors. Government funds were wasted as some staff were paid salaries by the project yet they did not execute any work. The drainage systems were dysfunctional and courtyard not paved for the slaughter shed in Katakwi Town Board which led to flooding and inaccessibility during the rain seasons.

In Kumi District, works on the valley tank in Agurut Village, Nyero Sub-county was behind schedule



(30% against expected 100% by October 2019) due heavy rains that disrupted construction. The water source, troughs and VIP latrine where not constructed in one of the island sites where a community crush was built due to accessibility challenges associated with water transport. There was also unclear communication from MAAIF about district staff contracts in light of the no cost extension given to the project up to March 2021.

In Bukedea District, the contractors were overwhelmed with the work in Teso area, thinly spread over many sites and unable to mobilise the required volumes of materials. Some infrastructures lagged behind the completion dates by four to six months.

# Challenges

- i) Slow progress of some works due to: a) inadequate capacity of contractors; b) inadequate supervision by MAAIF and LGs; and c) weak coordination and information sharing between MAAIF and the LGs.
- ii) The districts lacked maintenance and sustainability plans and budgets for infrastructure established by MAAIF.

#### Recommendations

- i) The MAAIF should improve information sharing and involvement of LGs in project planning, contracting, implementation and supervision of the infrastructure projects.
- ii) The MAAIF should continue building capacity of LGs and user committees in managing and sustaining the facilities.
- iii) The MAAIF should attract more competent contractors and ensure that each contractor was handling few manageable contracts.

#### **Fisheries Resources Programme**

# 3.6.9 Support to Sustainable Fisheries Development

#### **Background**

The Support to Sustainable Fisheries Development Project is a merger of all fisheries interventions in MAAIF including the uncompleted works under previous donor funded projects. The objective of the five-year (FY 2015/16 - FY 2019/20) GoU funded project is to promote sustainable development of fisheries through improvement of infrastructure and environment for fish production, handling markets and good marketing strategies for improved livelihoods in fishing communities. The project interventions are in five areas: restocking and strengthening management of restocked water bodies; strengthening monitoring on all water bodies; infrastructure development along the value chain; and control of weeds and water hyacinth.

The approved budget for Support to Sustainable Fisheries Development Project for FY 2019/20 is Ug shs 8.239 billion, of which Ug shs 3.716 billion (45%) was released and Ug shs 1.963 billion (52.82%) spent by 31st December 2019. This was very good release and fair resource absorption performance. The monitoring work was undertaken at MAAIF Headquarters and Bushenyi District to assess project performance. The detailed findings are presented below.

#### Performance

The semi-annual performance of the Support to Sustainable Fisheries Development Project in FY 2019/20 was fair rated at 66.88% (Table 3.14). Enforcement operations were undertaken by 16 Fisheries Protection Force (FPF) sectors in Dolwe, Jinja, Buvuma, Mukono, Wakiso, Mpigi, Mayuge, Masaka, Kalangala, Masaka Landing site, Kasese, Nakasongola, Amolatar, Kwania, Kayunga which minimized illegal fishing activities. This intervention greatly increased fish stock on Lake Victoria. Procurement for the technical consultancy for the pre-feasibility study for the Koki lakes, Nabugabo Lakes, Lake Victoria and Lake Kyoga Complex was ongoing.

Table 3.14: Performance of the Support to Sustainable Fisheries Development Project by 31st December 2019

Output	Annual Budget (Ug shs million)	Cum. receipts (Ug shs million)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)			
Conservation sites gazetted (number of Lakes)	1.000	0.400	4	1.00	7.59			
Fisheries quality assurance and standards established (number of activities)	1.862	0.853	18	4.00	10.97			
Sustainable fisheries production promoted (No. of activities)	2.915	1.403	7	4.00	35.38			
Market access for livestock and livestock products promoted (No. of activities)	2.000	0.750	15	3.00	12.95			
Fisheries infrastructure constructed (number)	0.462	0.000	1	0.00	0.00			
Total	8.239	3.406						
Programme performance	Programme performance							

Source: Field findings

Renovations of fish ponds at the fish fry centre in Bushenyi District continued using PMG funds. The procurement of 935 Fish Vessel Identification plates for Lakes Edward, George and Albert was ongoing. A survey to identify and map Kariba weed hotspot areas on lakes Kyoga and Albert in collaboration with the National Fisheries Resources Research Institute was undertaken.

# Implementation challenges

- i) Low output achievement due to reallocation of funds from original project activities of infrastructure development to facilitating inland and lake patrols by the Uganda Peoples Defence Force (UPDF). It is highly unlikely that the project will achieve its objectives.
- ii) Non-functionality of hatchery that has been under renovation for more than 10 years.



#### Recommendations

- i) The MAAIF should prioritise fisheries infrastructure development.
- ii) The MAAIF and Bushenyi District Local Government should finalise installation of equipment in the hatchery and the facility is commissioned.

#### **Overall MAAIF Vote Performance**

The overall semi-annual performance of MAAIF during FY 2019/20 was good rated at 64.65% (Table 3.15). The best performing programme Directorate of Animal Resources, while the worst performing was the Crop Resources Programme. Poor performance was associated with delayed approval of requisitions and disbursements by Accounting Officer and senior managers; delayed access to donor financing and late initiation of procurements.

Table 3.15: Overall MAAIF performance by 31st December, 2019

Vote	Performance (%)	
Crop Resources Programme	34.29	
Directorate of Agricultural Extension and Management	62.21	
Directorate of Animal Resources	99.05	
Fisheries Resources Programme	66.88	
Average MAAIF Performance	65.60%	

Source: Field findings

# 3.7 National Agricultural Advisory Services/Operation Wealth Creation

#### 3.7.1 Introduction

The Government is implementing the National Agricultural Advisory Services (NAADS) since 2001 to increase food and nutrition security and incomes of farming households. The programme was restructured in FY 2014/15 to deliver the Operation Wealth Creation (OWC) intervention that focuses on: provision of strategic commodities to support multiplication of planting and stocking materials; management of agricultural input distribution chains; and value addition and agribusiness business development.

The NAADS/OWC is constituted of one programme Agricultural Advisory Services with two sub-programmes: 01 Headquarters and 0903 Government Purchases. Both sub-programmes were monitored in 19 districts (Annex 1).

# **Agricultural Advisory Services Programme**

## 3.7.2 Government Purchases

# **Background**

The Government Purchases sub-programme mainly focuses on provision of strategic inputs and commodities to farmers. This sub-programme accounted for 98% of the total allocation to the Agricultural Advisory Programme. The approved budget for the Government Purchases sub-programme for FY 2019/20 was Ug shs 140.826 billion, of which Ug shs 79.113 billion (56%) was released and Ug shs 73.608 billion (93%) spent by 31st December 2019. This was a very good release and absorption performance.

#### **Performance**

By 31st December 2019, the NAADS Secretariat had supported farmers and farmers groups with planting and stocking materials for strategic commodities, value addition machinery and agro- machinery. These included maize (2,434.437); bean seed; coffee; banana suckers (632,187); cashew nuts (166,695); tea seedlings (2,903,393 million), tractors (280), 20 sets of maize milling equipment and four sets of feed milling equipment to the LGs was on going by February 2020. Four fruit processing factories were under construction and equipping in Yumbe, Kayunga, Kapeeka and Nwoya districts. Detailed performance is presented in Table 3.16.

Support was given to members of Atiak Sugar Cane OutGrowers Cooperative Society Limited in Northern Uganda in Amuru and Lamwo districts. This included bush clearing of 1,010 acres, ploughing and harrowing over 2000 acres, provision of 9,284 tons of seed cane and 3,128 bags of DAP fertilizer.

Most of the monitored districts received the inputs, agro-machinery and equipment; however it was lesser in quantities than allocated. Maracha, Kiryandongo and Kiryandongo districts received two tractors each, in addition to other value addition equipment. Tractors were noted to be of good quality except in Iganga District. The tractors given to Kiwemba Farmers' Cooperative Society in Nakalama sub-county Iganga District were of poor quality with low horse power (HP) - 60 HP and 40 HP. The 40 HP tractor was weak and could not be used during rain seasons when soils were heavy, its fuel consumption was excessively high. It was returned to Nakalama sub-county to wait for dry season to be used again.





NAADS/OWC tractors awaiting collection by farmers at Maracha District headquarters (left) and Kiryandongo District headquarters (right)



Inputs that were distributed directly from OWC suppliers to other stakeholders such as churches and politicians were not verified by the district and could not be accounted for. For example, Amuru District Local Government did not verify the viability of cassava cuttings that were distributed directly to the Catholic Diocese. The survival rate of heifers that were distributed in Acholi region in FY 2018/19 was low due to: a) inadequate knowledge and skills among farmers with regard to looking after improved breeds b) abrupt delivery of animals when farmers were not ready to look after them c) poverty and lack of funds to sustain the animals. In Pakwach District, maize was rejected due to late delivery at the onset of the dry season.



OWC financed mango processing factory under construction in Yumbe District

A Ug shs 2.799 billion mango processing factory was under construction in Pani Village, Yumele Parish, Lodonga Subcounty in Yumbe District. This was a joint effort by NAADS/OWC and China Huangpai Food Machines Uganda Limited. Block 1 was at 60% completion, while the Boiler House and mechanical works were at 10% completion level.

### Challenges

 Inadequate quantities of inputs pose a challenge to distribution: each farmer given small quantities that do not significantly impact on production, household incomes and food security.

ii) High mortality of crops due to harsh climate, soil infertility, inadequate extension services and pests and diseases

#### Recommendations

- i) The MAAIF should consider focusing the resources on economically viable interventions such as providing value addition equipment and productivity enhancing inputs like fertilizers.
- ii) The MAAIF should strengthen the extension delivery system to increase farmer access.
- iii) The MAAIF and LGs should promote climate smart agriculture.

# 3.7.3 Head quarters

The Headquarters sub-programme focuses on the administration and management of the Government Purchases sub-programme. The approved budget for FY 2019/20 was Ug shs 5.07 billion, of which Ug shs 2.47 billion (48%) was released and Ug shs 2.05 billion (83%) spent by 31st December 2019.

#### Performance

The NAADS Secretariat coordinated and managed the procurement and distribution of inputs, tractors, value addition equipment and supported the value chain development. The detailed findings of this subprogramme in the monitored districts are presented in Table 3.16.

# Challenges

- i) Inadequate inputs and equipment procured and distributed to farmers due to re-allocation of funds to accumulated arrears from FY 2018/19 and support for Atiak Sugar Cane OutGrowers Cooperative Society Limited; this made it difficult for the NAADS Secretariat to project how much inputs would be availed to farmers during March-May 2020 season.
- ii) Delayed delivery of agro-machinery and value addition equipment due to lengthy and complex procurement processes involving international competitive bidding procurement
- iii) Inadequate extension services tagged to inputs distribution led to lack of preparedness of farmers to receive materials in many districts; and poor handling and management of inputs provided to farmers in district local governments.
- iv) Delayed and uneven distribution of rains in some parts led to late distribution of seed for food security crops.

#### Recommendations

- i) The MAAIF, NAADS/OWC and MFPED should adhere to the PFM rules to avoid accumulation of arrears and re-allocations of budget mid-year.
- ii) The MAAIF and LGs should equip and facilitate the extension workers to improve monitoring and supervision of the NAADS/OWC programme.
- iii) The MAAIF and LGs should promote appropriate irrigation and water harvesting technologies at farm level

## Overall performance of the Agricultural Advisory Services programme

The overall semi-annual performance of the NAADS/OWC during FY 2019/20 was very good (92.38%). Inputs, agro-machinery and value addition equipment were distributed as planned (Table 3.16).

Table 3.16: Performance of Agricultural Advisory Services by 31st December 2019

Output	Annual Budget (Ug shs 000')	Cum. Receipt (Ug shs 000')	Annual Target	Cum. Achieved Qty	Physical performance Score (%)
Output: 06 Programme management and coordination(No. of activities)	5,043,902	2,465,675	32	10	63.93
Output: 15 Managing distribution of agricultural inputs (No. of exercises)	20,974,220	11,785,095	13	7	95.83



Output: 18 Support to upper end Agricultural Value Chains and Agribusiness Development (No. of activities)	2,350,000	1,360,000	5	3	100
Output: 22 Planning, Monitoring and Evaluation (No. of activities)	2,478,779	1,663,778	14	5	53.21
Output: 76 Purchase of Office and ICT Equipment, including Software (Sets of equipment)	83,000	33,000	3	1	83.84
Output: 14 Provision of priority &strategic agricultural inputs- TRACTORS (No. of tractors)	14,739,675	11,932,117	210	170	100
Output: 14 Provision of priority agricultural inputs -MAIZE (KG)	970,569	944,169	222,617	216,617	100
Output: 14 Provision of priority agricultural inputs -BEANS (KG)	86,400	86,400	18,000	18,000	100
Output: 14 Provision of priority agricultural inputs -BANANA TISSUES (PLANTLENTS)	131,275	118,000	44,500	40,000	100
Output: 14 Provision of priority agricultural inputs -CASSAVA CUTTINGS (BAGS)	180,000	58,800	4,500	1,470	100
Output: 14 Provision of priority agricultural inputs -COFFEE (SEEDLINGS)	3,738,497	3,329,931	11,328,325	9,966,438	98.77
Output: 14 Provision of priority agricultural inputs -CASHEW NUTS	188,304	64,897	33,034	11,710	100
Output: 14 Provision of priority agricultural inputs -MANGO	270,000	68,971	100,000	25,545	100
Output: 14 Provision of priority agricultural inputs -DAIRY CATTLES (NO.)	88,200	58,800	36	24	100
Programme performance					92.38%

Source: Field findings

## 3.8 National Animal Genetic Resources Centre and Data Bank

#### 3.8.1 Introduction

The National Animal Genetic Resources Centre and Data Bank (NAGRC&DB) was established under the Animal Breeding Act, 2001 to conserve and ensure continuous supply of animal genetic resources and breeding materials in the country. Guided by its five year Strategic and Investment Plan 2015/16 – 2019/20, the NAGRC&DB implements its mandate through 11 farms/ranches and satellite centres. The institution is implementing Project 1325: Strategic Intervention for Animal Genetic Improvement Project (SAGIP) during 2016 to 2020 with the purpose of increasing livestock productivity, through sustainable utilization of animal genetic resources and strengthening institutional capacity.

The approved budget for NAGRC&DB for FY 2019/20 is Ug shs 63.242 billion, of which Ug shs 36.690 billion (57%) was released and Ug shs 25.645 billion (71%) spent by 31st December 2019. This was very good release and good expenditure performance. The NAGRC&DB has one programme - Breeding and Genetic Development and 10 sub-programmes implemented through ranches and stock farms. The programme and selected ranches and stock farms that were monitored are presented in Annex 1.

# **Breeding and Genetic Development**

#### **Performance**

The overall performance of the Breeding and Genetic Development Programme is presented in Table 3.17. The detailed performance of the monitored ranches and stock farms are presented below.

#### 3.8.2 Aswa Ranch

Located in Burlobo Village, Burlobo Parish, Angagura Sub-county in Pader District, Aswa Ranch is mandated to breed and conserve Ankole, Boran and Zebu cattle. By 31<sup>st</sup> December 2019, a goat house and an apiary with 160 beehives were established at Aswa Ranch. The hives were undergoing bee colonization and were yet to produce honey. The key challenge was lack of staff with competence in apiary management.





Apiary project (left) and goat house established at Aswa Ranch in Pader district



A modest increase (183) in the animal herd was realized from 2,093 cattle on 1<sup>st</sup> July 2019 to 2,276 cattle on 31<sup>st</sup> December 2019. The growth of animal herds and the breeding programme was negatively affected by lack of paddocking, inadequate good quality pastures, lack of tractors, understaffing and long distances to water sources.

Key challenges: i) Land encroachment due to poor surveying and demarcation of ranch land. For example, 10 square miles had been encroached on by Banuti Ranchers since 2016; some senior Government officers and politicians and private investors were illegally occupying the ranch land ii) inadequate staff especially herdsmen, field assistants; iii) inadequate staff accommodation; iv) inadequate imprest to address emergencies affecting the animals; v) water reticulation system was left incomplete in 2018/19 at 40%.

#### 3.8.3 Kasolwe Stock Farm

The stock farm is located in Kasolwe Bulagala B Village, Kasolwe Parish, Kagumba Sub-county Kamuli District. The farm focuses on conservation of the Small East African Zebu, cross breeding with dairy and beef animals, goat conservation and popularizing the Kuroiler birds. Several structures were under construction and at varying levels of completion including one cattle shed (50%), poultry unit (80%), spray race, piggery units (95%), hay barn (98%), hatchery (30%), feed mill (50% awaiting installation of machinery) and staff houses (50% - 80%).

Works for the training centre and hostel were at foundation level. The new structures and enterprises constructed at the stock farm have posed emerging challenges: inadequate staff to handle all the enterprises; and lack of power, water and proper access roads to/for the newly established infrastructures. Goat reproduction was slow due to poor housing that led to high prevalence of pneumonia and deaths.

# 3.8.4 Livestock Experimental Station

The Livestock Experimental Station (LES) is located in Lunnyo Village, Entebbe Division A, Entebbe Municipality in Wakiso District. By 31st December 2019, 26 bulls were well maintained at

the LES. Only 3,530 (3.53%) farmers technicians were trained of the planned 100,000 due to low farmer awareness of the availability opportunities ofthe training lack of appropriate training and structures. Most training structures in NAGRC&DB centres were improvised and not according to standard designs for teaching modern farming practices.

Training in community breeding was not undertaken due to lack of specialised vehicles and equipment to deliver artificial insemination (AI) materials to training centres. This challenge in turn resulted in low production of liquid nitrogen as consumption was low. Performance of the LES and community breeding



One of the 26 bulls being maintained at the bullstud at LES in Entebbe Municipality, Wakiso District

programme was low due to inadequate staffing as some of the personnel were engaged in delivering AI materials in the field; delayed disposal of eight old unproductive bulls; slow procurements and delivery of equipment and materials by suppliers; and inadequate budget in LGs to promote AI effectively.

#### 3.8.5 Lusenke Stock Farm

Located in Lusenke Village, Namusaala Parish, Busaana Sub-county in Kayunga District, Lusenke Stock Farm undertakes conservation and upgrading of the East African Short Horn Zebu and production of high quality animal feeds. Twelve poultry, piggery and cattle structures and one staff house were under construction with support from Lusenke Livestock Transformation Project. Most structures were at roofing level (50% completion level), apart from the cattle shed and hatchery at foundation level (10%), hay barn (95% completed) and feedlot (site clearing) by 2<sup>nd</sup> January 2020.

There was a modest growth (45) in the cattle herd from 635 animals on 1<sup>st</sup> July 2019 to 680 animals by 31<sup>st</sup> December 2019. A total of 24 cattle died due to tick borne diseases, weather related problems and old age. A total of 41 animals were slaughtered during the visit of a Parliamentary Committee, district leaders and a Presidential meeting. A total of 9,597 poultry birds were received, of which 1,482 (15%) had died by 31<sup>st</sup> December 2019 due to stress/congestion and cannibalism arising from inadequate space and feeds. Key challenges were suffocation of animals and birds due to floods and mud, delayed disposal of animals, impassable access roads and understaffing.





Hay barn construction near completion (left) and part of the multipurpose poultry received from NAGRC & DB Headquarters at Lusenke Stock Farm

# 3.8.6 Njeru Stock Farm

The farm is located in Kiryowa Village, Bukaya Parish, Njeru Town Council in Buikwe District and mainly focuses on dairy development. There was low growth in animal herds at Njeru Stock Farm: dairy cattle grew by a net 21 animals from 214 animals on 1<sup>st</sup> July 2019 to 235 animals on 31<sup>st</sup> July 2019; the goat herd grew by a net of 20 animals from 70 to 90; and the pig herd reduced by a net 37 animals from 152 to 115 animals over the same period.

A total of 40 acres of maize and 20 acres of forage were planted; however about 50% of the field for forage was destroyed due to flooding and water logging. A total of 300 acres of bush was cleared. Performance of the breeding programme was constrained by inadequate pastures and land for paddocking due to the reported land grabbing by a senior public figure who illegally claimed 300 acres of the farm land. Other farmers illegally grazed their animals on the stock farm due to lack of fencing and land demarcation. Most access roads on the farm were blocked by the land grabbers which constrained animal breeding. The farm lacked basic infrastructure including toilets and staff quarters.



#### 3.8.7 Rubona Stock Farm



Administration offices under construction at Rubona Stock Farm in Bunyangabo District

Rubona Stock Farm is located in Buhuna Village, Buhuna Parish, Rubona Town Council in Bunyangabo District. The farm registered a small growth (16) in cattle herds from 496 animals on 1st July 2019 to 512 animals on 31st December 2019 and negative growth (-16) for the goat herds from 191 to 175 animals during the same period. The factors that contributed to the small growth in the cattle herd were: 37 animals were sold, of which 21 were sold to the National Enterprise Corporation (NEC) for breeding; 10 heifers were donated to a women's organization in Kasese District and 12 animals died due to weather related diseases including pneumonia. Calves got stuck in mud and died.

The negative growth in the goats herd was attributed to 51 goats that died due to pneumonia and worms as a result of the cold conditions. Key challenges to the breeding programme included: poor animal nutrition due to lack of funds to do bush clearing and planting good quality pastures; understaffing and inadequate staff accommodation. By 31st December 2019, construction of the administration offices with a laboratory and stores and the Manager's house was at 55% complete.

#### 3.8.8 Ruhengyere Field Station

The station is located in Kayonza Village, Kayonza Parish, Kikatsi Sub-county in Kiruhura District. The cattle herd increased modestly (55) from 3,572 animals on 1<sup>st</sup> July 2019 to 3,627 animals by 31<sup>st</sup> December 2019. There were significant cattle births (381 animals) during the period; however there were also large animal sales (232) during the period. During the same period, the goat herd increased significantly from 1,590 to 1,750 animals, a net increase of 160 animals. A high level of goat mortality (202) was noted due to inadequate housing, poor quality pastures and high prevalence of diseases.



Administration offices under construction at Rudona Stock Farm in Bunyangabo District

By 31<sup>st</sup> December 2019, works for the Artificial Inseminators Hostel was 80% done; the works were behind schedule and had stalled due to change in scope of works that required more funds. This issue was under discussion at MAAIF. Construction of a hay barn was at 40% completion level; it was also behind schedule as works were supposed to have been completed by November 2019. Challenges to infrastructure development related to delays in approvals and payment for completed works and frequent changes in scope of works by MAAIF.

A key challenge was land encroachment and parcelling of ranch land to other users: out of the 21 square miles on the ranch, 10 square miles were allocated to an army barracks; another 2 square miles were reported as occupied by Mr. Rutahaigwa and the matter was in courts of law.

# 3.8.9 Sanga Field Station

Located in Sanga Village, Sanga Parish, Sanga Town Council in Kiruhura District, the station focuses on upgrading Brahman crosses and conservation of Kigezi and Mubende goats. The station realised a modest growth (49) in cattle herds from 369 animals on 1<sup>st</sup> July 2019 to 410 animals on 31<sup>st</sup> December 2019. The goats herd reduced by 28 animals from 688animals to 660 animals within the same period. The high goat mortality was due to inadequate housing leading to overcrowding and high prevalence of diseases; and poor quality pastures that had poisonous plants. The station was unable to harvest 90 acres of hay due to unavailability of tractors.

The breeding performance of the cattle herd was lower due to lack of funding for community breeding, predominance of poor quality heifers and inadequate pastures due to land encroachment. About one square mile out of the 2.5 square miles available on the station was encroached upon by a one Captain Bashaiza. The land encroachment reduced access to farm infrastructure as one dip tank and two valley dams were enclosed within the encroached land. The land case has remained unconcluded for many years in the courts of law. This challenge is exacerbated by the lack of clear demarcation of boundaries on the farm and absence/no access to a land title.

# Overall performance of the Breeding and Genetic Development Programme

The overall semi-annual performance of the Breeding and Genetic Development Programme during FY 2019/20 was fair rated at 63.57% (Table 3.17). Some key outputs especially in the area of infrastructure development were achieved while procurements for equipment and other consumables was still ongoing. Planned activities at the ranches were partially implemented due to inadequate disbusements from NAGRC&DB Headquarters. Low performance of the breeding programme was noted as many animals were of old and lowquality and animal disposal was not done in the absence of a functional board. The mortality of goats was high due to the high prevalence of diseases and negative effects of heavy rains. Land encroachment on most stations by public figures and Government officials was constraining the breeding programme.



Table 3.17: Performance of the Breeding and Genetic Development Programme by 31st December 2019

Output	Annual Output Budget (Ug shs)	Cumulative Receipt	Annual Target	Cum. Achieved	Physical performance
Poultry structures (5), Pig Sty (3), Cattle shed (1), staff house (1), Buck Stud (1), Feedlot (1), Hay barn (1) and road (1) constructed at Lusenke Stock Farm (number of structures)	4,520,224,338	(Ug shs) 1,083,025,536	14	Quantity 5.6	Score (%) 11.72
Pig sty (3), poultry unit (1), spray races (1), staff houses (2), hay barn (1), cattle shed (1) and hatchery (1) constructed/established at Kasolwe stock farm (number of structures)	3,550,224,338	864,337,760	8	3.2	9.21
Feed mill established at Kasolwe stock farm (number)	2,200,000,000	760,217,069	1	0.5	5.70
Chicks produced and distributed to farmers (number)	901,551,000	528,999,878	1000000	90363	0.36
Honey bee colonies procured and installed at Aswa Ranch (number)	179,975,000	179,975,000	160	160	0.47
Bush cleared for pasture production (acres)	66,000,000	12,500,000	450	100	0.17
Forage planted (acres)	85,220,000	48,310,000	460	330	0.22
Water troughs and reticulation system constructed (number of items)	204,950,000	109,950,000	15	1	0.07
Honey bee colonies procured and installed at Aswa Ranch (number)	40,000,000	20,000,000	440	90	0.04
Silage made (activity)	6,400,000	3,200,000	1	0	0.00
Outreach programme facilitated by procurement of vehicles and motorcycles (number)	212,000,000	106,000,000	5	2	0.44

Farm roads graded (km)	5,000,000	2,500,000	10	0	0.00
Office block constructed and staff quarters rehabilitated at Rubona Stock Farm (number)	750,000,000	177,409,804	2	1.1	1.94
Hay barn constructed at Sanga Field Station (number)	5,000,000	-	1	0	0.00
Structures renovated at Ruhengyere Field Station (number)	996,000,000	567,720,000	40	1	0.11
Semen produced and extended to farmers (number of dozes)	1,319,936,000	1,319,936,000	108000	22838	0.72
Assorted artificial insemination kits, LN2 containers and field materials procured and delivered to farmers (lots)	2,000,000,000	1,000,000,000	1	0.3	3.11
Liquid Nitrogen produced and distributed	968,753,000	484,376,500	120000	29476	1.23
National Bull stud maintained (number of animals)	50,000,000	162,104,000	26	26	0.04
Improved dairy animals produced (number)	3,902,179,509	3,950,000,000	2000	623	3.11
Improved beef animals produced (number)	4,800,000,000	2,400,000,000	3500	841	5.98
Improved pigs produced and extended to farmers (number)	3,400,000,000	2,700,000,000	2000	54542	8.82
Farmers trained in pasture establishment (number)	4,300,000,000	4,150,000,000	5000	1300	3.00
Dairy breeding associations and societies established and supported (number)	4,100,000,000	2,051,000,000	6	2	7.08
Total	38,563,413,185	22,681,561,547			
Programme Performance					63.57%

Source: Field findings



#### **Overall NAGRC&DB Performance**

The performance of NAGRC&DB by 31<sup>st</sup> December 2019 was fair (63.57%). Breeding and genetic development continued at the National NAGRC&DB stations involving conservation and multiplication of beef and dairy cattle, goats, pigs and poultry breeds. However, the growth in animal herds was modest and sometimes low as a result of inadequate breeding infrastructure, land encroachment, sales and give away of animals for various functions, climate related problems such as high prevalence of diseases, and low disbursement of funds from NAGRC&DB Headquarters.

# Challenges

- i) Land encroachment in Aswa Ranch, Sanga Field Station, Njeru Stock Farm and Ruhengyere Field Station by Government/public officials due to lack of demarcation of boundaries, absence of land titles, and parceling out of land to individuals, private investors and other entities by Government.
- ii) Slow growth in the animal herds due to several factors: a) increased animal death due to weather related catastrophes; b) shortage of pastures due to land grabbing and encroachment; c) low staffing levels to carry out community breeding; c) loss of animals due to lack of a governing body to authorize disposal of old, blind, lame or non-productive animals; d) donation/use of animals for festive seasons and public events.
- iii) Low absorption of released funds due to delayed initiation and concluding of procurement processes for infrastructure works; inadequate disbursements to the ranches and stations.

#### Recommendations

- i) The Uganda Land Commission, MAAIF and agencies should expedite undertaking surveying of all NAGRC&DB lands, demarcate boundaries and ensure that they are all titled. Land cases of encroachment should be followed up in courts of law, concluded and the illegal encroachers evicted.
- ii) The NAGRC&DB should reduce/eliminate giving away animals for other reasons other than for breeding purposes
- iii) The NAGRC&DB should fast track disposal of unproductive old animals and replace them with good quality breeds.
- iv) The NAGRC&DB should decentralize funding to provide higher disbursements to the stations and ranches for emergencies and operational expenses.

# 3.9 National Agricultural Research Organisation

## 3.9.1 Introduction

Established by an Act of Parliament in 2005, the mission statement of the National Agricultural Research Organisation (NARO) is "To generate and disseminate appropriate, safe and cost effective agricultural technologies". The NARO has one programme 51 Agricultural Research with 20 sub-programmes namely: 01 Headquarters; Project 0382 Support for NARO; 07 National Crops Resources Research Institute (NaCRRI); 08 National Fisheries Resources Research Institute (NaFIRRI); 09 National Forestry Resources Research Institute (NaFORRI); 10 National Livestock Resources Research Institute; and 11 National Semi arid Resources Research Institute (NaSARRI).

Other sub-programmes are: 12 National Laboratories Research; 13 Abi Zonal Agricultural Research and Development Institutes (ZARDI); 14 Bulindi ZARDI; 15 Kachwekano ZARDI; 16 Mukono ZARDI; 17 Ngetta ZARDI; 18 Nabuin ZARDI; 19 Mbarara ZARDI; 20 Buginyanya ZARDI; 21 Rwebitaba ZARDI; 26 NARO Internal Audit; and 27 National Coffee Research Institute (NaCORI). The semi-annual monitoring work covered the Agricultural Research Programme and 9 out of the 20 NARO sub-programmes as indicated in Annex 1.

The approved budget for NARO for FY 2019/20 is Ug shs 79.661billion, of which Ug shs 36.713 billion (46.08%) was released and 30.616 billion (83.39%) spent by 31st December 2019. This was very good release and good expenditure performance.

# **Agricultural Research Programme**

By 31<sup>st</sup> December 2019, research to generate technologies and improved agronomic practices was undertaken at the National Agricultural Research Organization (NARO) Zonal Agricultural Research Development Institutes (ZARDIs), Development Institutes and off farm. The detailed performance of selected NARO institutions is presented below.



Maize foundation seed under production at Abi Zardi in Arua District

#### 3.9.2 Abi ZARDI

Located in Obopi Village, Ewadri Parish, Madibe Sub-county in Arua District, the Abi ZARDI undertook research and technology generation on soil conservation methods and various crop and livestock commodities. Four improved varieties (Narocas 1, Nase 19, Nase 14 and Nase 3) and seven land races were submitted for nutritive quality profiling. Cassava value chains were identified and key information generated.

With support of non-state partners, five acres of cassava were under irrigation for experimentation. The elite dairy herd and elite Mubende goat herd were

<sup>6</sup> MAAIF, 2016.



maintained onstation. Adaptive trials for grafted mango, sorghum, maize and bean varieties and shrubs were undertaken. The key challenge was partial implementation of projects due to: a) inadequate staff as some had left for other jobs while five personnel were away on PHD training; and b) dilapidated vehicles and inadequate car maintenance funds.

#### 3.9.3 Bulindi ZARDI

Bulindi ZARDI is located in Bulindi Village, Bulindi Parish, Bulindi Sub-county, Hoima District. Adaptive trials were undertaken on developing fish productivity technologies and silage making. Appropriate housing designs for piggery, poultry and dairy was under study. Other experiments were on commercialization of the goat vale chain. A total of 25,000 grafted mango and citrus seedlings, 6,250 coffee seedlings and 6,250 banana suckers were generated for farmer access. Fourty acres of cassava were established and maintained. Farmers were trained in climate smart agriculture. On-station demonstration sites were established and maintained for beans, maize, rice, groundnuts, bananas, coffee, climate smart agriculture and livestock forages.

## 3.9.4 Headquarters and Support for NARO

The Headquarters sub-programme, also referred to as NARO Secretariat (NAROSEC), is located in Entebbe Municipality, Wakiso District. Procurements for furniture and Information Communication Technologies (ICTs) were at varying stages ranging from contract signing to evaluation. Some contracts had not yet been initiated. The tenders for procurement of most machinery and equipment such as tractors, farm and livestock handling machines and water pumps were concluded but funds were insufficient. Supportive recurrent items that were procured/under procurement included protective gear, insurance, vehicle maintenance and chemicals. Works were ongoing for administrative blocks, calf barns, hay barns and value addition and irrigation facilities at various stations.

### 3.9.5 Mbarara ZARDI

Mbarara ZARDI is located in Mbarara Municipality, Mbarara District. On station and on-farm experiments on the interaction between agro-forestry, bean production and aphid effects were undertaken. One research protocol on improving banana productivity through innovative soil fertility and moisture management and control of diseases was produced. Brood stock of catfish were obtained and conditioned in concrete tanks at NaFIRRI and Kajjansi Station. Research was initiated on enhancing the quality of ghee to support the cottage industry in the region.



Slab for seed sorting building was 100% complete at Mbazardi in Mbarara District

High quality crop planting materials of cassava, coffee and bio-fortified common beans and citrus were produced and partially disseminated. A 1,000 bags of cuttings of high quality NARO Sugar Napier were disseminated to 308 farmers. Artificial insemination experiments were undertaken as well as feeding trials on low cost higher quality dairy and fish feed rations. The first phase of constructing a slab for the seed sorting building was 100% completed.

#### 3.9.6 National Coffee Research Institute

The National Coffee Research Institute (NaCORI) is located in Kituza Village, Ssaayi Parish, Ntenjeru Sub-county in Mukono District. Research was undertaken, with support from the Uganda Coffee Development Authority (UCDA), to develop high yielding and disease resistant Robusta coffee and cocoa varieties and associated agronomic practices that could enhance performance. Selections of Coffee Wilt Disease Resistant Robusta hybrid clones was undertaken on station and on-farm in selected districts. High yielding, disease and pest tolerant clones were under experimentation. Coffee planting materials were produced and disseminated to farmers. Coffee value addition and climate smart agriculture experiments were undertaken.



Recently constructed foundation with cracks at NACORI in Mukono District

Two new screen houses were built; 71,000 Robusta cuttings were in rooting bins; 41,000 rooted cuttings were under hardening; 14,000 cuttings were ready for planning and 8,000 plantlets were prepared for establishing the mother garden. New varieties of coffee and cocoa were under development. The UCDA was supporting infrastructure and equipment acquisition as well training of scientists at PHD level

Coffee research was constrained by inadequate and dilapidated research infrastructure, low staffing

level, delayed receipt of funds and incompetent contractors that delivered shoddy work that had to be redone.

## 3.9.7 National Semi-Arid Resources Research Institute

The National Semi-Arid Resources Research Institute (NASRRI) is located in Iglo Village, Iglo Parish, Serere Town Council, Serere District. Development of disease and drought resistant cotton varieties was ongoing. A total of 26 advanced cotton lines were planted in six sites (onstation, Lira, Kasese, Nebbi, Adjumani and Tororo). Evaluation of conservation tillage and fertilizer applications on sesame, groundnuts and sunflower in the Teso, Karamonja, Bunyoro, Lango and Acholi regions continued. The following infrastructure works were at 90% completion: Administration block, mechanical workshop, stores and two screen houses.

The key challenges were: high staff attritution reducing programme performance; high prevalence of cotton pests and diseases; lack of a centralized laboratory; inability to measure the oil content of different cotton varieties due lack of appropriate machinery and laboratories and inadequate vehicles to aid monitoring of off station experimental sites.





Mechanical workshops (left) and screen houses (right) near completion at NASRRI in Serere District

#### 3.9.8 Rwebitaba ZARDI

Rwebitaba ZARDI serves the districts of Kyegegwa, Kyenjojo, Kabarole, Kamwenge, Kasese, Bundibugyo and Ntoroko. Research is undertaken at two stations: Rwebitaba Tea Research Centre in Kyenjojo District, and Kyembogo Station in Kyembogo Village, Kabarole District. Twenty clones of speciality tea where maintained in the gardens. Agronomic performance of 14 matooke varieties on farm was generated. Twenty five coffee nurseries were maintained and 1 million coffee seedlings were generated and made accessible to farmers. Some planned outputs were not delivered due to partial disbursement of funds. Works were ongoing for construction of a conference hall, laboratories and renovation of the administrative buildings.

Construction of the conference hall was behind schedule due to rains and so many variations in scope and items that were not included in the original bills of quantities. Approvals of the variations by NARO Headquarters took on average 1.5 months which slowed the works considerably.





The conference hall under construction (left) and administrative buildings under renovation (right) at Rwebitaba ZARDI in Kyenjojo District

## Overall performance of the Agricultural Research Programme

The overall semi-annual performance of the Agricultural Research Programme during FY 2019/20 was good (76.40%) as shown in Table 3.18. Technology generation and infrastructure development continued at all the NARO institutions. Performance was constrained by inadequate staffing and vehicles, slow approval of scope variations for infrastructure development, lengthy procurement procedures, slow disbursement of funds from Headquarters and climate related constraints.

Table 3.18: Performance of the Agricultural Research Programme by 31st December 2019

Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)
Farming machinery and equipment procured (lots)	2,715,738,000	975,107,200	8	1	2
Supportive recurrent items procured (lots)	1,370,407,000	821,515,981	13	5	4
Civil works procured and completed (lots)	10,336,293,000	2,692,747,474	20	5	51
Vehicles procured (number)	796,000,000	383,989,145	4	2	4
Cassava research undertaken and value chains promoted (number of activities)	139,650,000	64,239,000	11	5	1
Elite dairy herd and Mubende goat herd maintained (quarters)	7,000,000	4,267,000	4	2	0
Fish technologies developed and promoted (number of activities)	240,060,000	112,575,600	9	6	1
Commercialisation of goat value chains assessed (number of activities)	812,000,000	373,520,000	2	1	4
Crop technologies, agro- forestry and climate smart agriculture options researched (number of activities)	426,746,000	186,786,820	28	18	2



Adaptation experiments of bean, sorghum, sunflower, groundnuts and banana production systems undertaken (number of activities)	120,950,000	75,100,000	9	4	0
Tea production and productivity technologies generated (number of activities)	100,039,000	44,194,000	8	3	0
Potato technologies generated (number of activities)	18,000,000	15,400,000	6	-	-
Apple evaluation trials conducted (number of activities	54,900,000	25,100,000	4	1	0
Animal resources technologies developed and promoted (number of activities)	250,226,000	111,900,000	6	4	1.28
Coffee variety improvement experiments implemented (number of activities)	512,300,000	232,771,000	25	13	0.00
Coffee plant health management research undertaken (number of activities)	400,000,000	228,405,000	19	11	2.04
Total	19,572,953,000	6,347,618,220			
Programme performance				76.40%	

Source: Field findings

# Overall performance of NARO

The overall performance of NARO was good rated at 76.40%. New technologies of crop, fish, livestock, agro-forestry and apiary where under different stages of trial and several adaptive experiments on-station and off-station were being carried out. Several agricultural infrastructure were under development at the various institutions by 31st December 2019.

## Challenges

- i) Failure of the Uganda National Bureau of Standards (UNBS) to verify compliance of the Transluminator machine that was imported from Nairobi Medical Stores due to capacity gaps. The machine was stuck in Entebbe Cargo accumulating demurrage charges.
- ii) High staff attrition due to low remuneration whereby programmes are managed by technicians.
- iii) Re-allocation of NARO land to investors leaving less for carrying out meaningful research and leading to distortion in experiment results.
- iv) Loss of experimental results and partial non-conclusive research due to: a) excessive rains, pests and diseases that led to on average 60% losses b) delayed disbursement of funds to the Institutes c) lack of/dilapidated vehicles to monitor off station experimental sites and key infrastructures like laboratories.

#### Recommendations

- i) The UNBS should enhance staff capacity in assessing and verifying agricultural machinery for compliance to national standards.
- ii) The Ministry of Public Service (MoPS), Ministry of Finance, Planning and Economic Development (MFPED) and NARO should review the staff conditions of service at NARO and find options for remunerating staff to reduce staff attrition.
- iii) The NARO should research, adapt and promote climate smart technologies in the country.



# **CHAPTER 4: CONCLUSION AND RECOMMENDATIONS**

## 4.1 Conclusion

The approved budget for the Agriculture Sector for FY 2019/20 excluding arrears and external financing is Ug shs 720.251 billion, of which Ug shs 404.321 billion (56%) was released and Ug shs 317.498 billion (79%) spent by 31st December 2019. This was very good release and good expenditure performance.

The overall agriculture sector performance during July to December 2019 was good (70.46%). The good performing programmes were: Agricultural Advisory Services Programme (92.38%), Agricultural Credit Facility (85.23%), Cotton Development Programme (79.65%), Agricultural Research Programme (76.40%). The fairly performing programmes were: Breeding and Genetic Development (63.57%). The poorly performing programmes were: Dairy Development and Regulation (37.25%), and Crop Resources (34.29%).

Good performance was associated with timely releases and procurements; increased agricultural infrastructure development; availability of donor financing as well counterpart funding; and distribution of increased volumes of inputs, machinery and equipment.

Poor performance was due to delayed initiation and conclusion of procurements; land grabbing and encroachments on NARO, DDA and NAGRC&DB lands; extreme climate conditions leading to increased incidence of pests and diseases and high crop and animal mortality; low capacity of contractors to execute infrastructure works in time; budget short falls. Other key PFM related challenges were late approval and disbursement of funds by accounting officers; expenditure of FY 2019/20 funds on arrears of 2018/19 and re-allocation of resources mid-year such as for Atiak Sugar Cane OutGrowers Cooperative Society Limited under the Agricultural Advisory Services Programme.

Animal use for non-breeding purposes and deaths slowed growth of animal herds on NAGRC&DB farms. A total of 41 animals at Lusenke Stock Farm were slaughtered during the visit of a Parliamentary Committee, district leaders and a Presidential meeting. On Rubona Stock Farm, 10 heifers were donated to a women's organization in Kasese District and 12 animals died due to weather related diseases including pneumonia.

### 4.2 Recommendations

- i) The Uganda Land Commission, MAAIF and agencies should expedite undertaking surveying of all NAGRC&DB, NARO and DDA lands, demarcate boundaries and ensure that they are all titled. Land cases of encroachment should be followed up in courts of law, concluded and the illegal encroachers evicted.
- ii) The MFPED should enforce compliance of MAAIF and agencies to PFM reforms, particular aspects relating to stopping accumulation of arrears, re-allocations mid-year, delayed approvals of requisitions by accounting officers, delayed contracting processes and late provision of advisory notes to spending agencies.
- iii) The MFPED and donor agencies should review all the prior conditions attached to donor financing and find practical solutions to expedite their implementation.
- iv) The MAAIF, agencies and LGs should promote and support climate smart agriculture at farm level, including use of appropriate irrigation technologies and crops tolerant to drought, diseases and pests.

## REFERENCES

BoU, 2020. Agricultural Credit Facility Progress Report December 2019. Bank of Uganda, Kampala.

GoU, 2018. Memorandum of Agreement for the Agricultural Credit Facility. Ministry of Finance, Planning and Economic Development, May 2018 Kampala.

GoU, 2015. Second National Development Plan 2015/16 – 2019/20 (NDPII). National Planning Authority, Kampala.

IFAD and GoU, 2017. Final project design report. National Oil Palm Project (NOPP)

MAAIF, MOH, MOES and MOLG, 2019. Uganda Multi-Sectoral Food Security and Nutrition Project (UMFSNP) Project Status Report September 2019.

MAAIF, 2019. Ministerial Policy Statement for MAAIF for Financial Year 2019/20, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe.

MAAIF, 2019a. Uganda Multisectoral Food Security and Nutrition Project Progress Report 31<sup>st</sup> December 2019. Ministry of Agriculture, Animal Industry and Fisheries, Entebbe.

MAAIF, 2016. National Agricultural Extension Policy. October 2016, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe

MFPED, 2019. Approved Estimates of Revenue and Expenditure (Recurrent and Development) FY 2019/20. Volume 1: Central Government. Ministry of Finance, Planning and Economic Development, Kampala.

NAGRC&DB, 2017. NAGRC&DB Strategic and Investment Plan 2015/16 – 2019/20. National Animal Genetic Resources Centre and Data Bank, Entebbe.

World Bank, 2014. Project Appraisal Document for the Uganda Multisectoral Food Security and Nutrition Project, December 31, 2014.



# **ANNEX**

Annex 1: Agriculture Sector Programmes Monitored for FY 2019/20 semi-annual

Vote	Programme	Sampled sub-programmes	Sampled districts/ Institutions		
008 MFPED	Agricultural Credit Facility	Agricultural credit facility projects	Bank of Uganda, Wakiso, Hoima, Soroti, Bushenyi, Mukono, Masindi, Luuka		
		01 Headquarters		Nwoya, Omoro, Amuru,	
152 NAADS	Agricultural Advisory Services	0903 Government purchases	Pakwach, Nebbi, Yumbe, Maracha, Arua, Jinja, Mayuge, Bugweri, Bugiri, Namayingo, Kiryandongo, Masindi, Kasese, Bushenyi, Iganga, Kyenjojo		
142 NARO	Agricultural Research	01 Headquarters			
		0382 Support for NARO			
		11 National Semi and Resources Research Institute (NASRRI)			
		13 Abi ZARDI	NARO Secretariat, Arua, Mbarara, Serere, Hoima, Kabarole, Mukono		
		14 Bulindi ZARDI			
		19 Mbarara ZARDI			
		21 Rwebitaba ZARDI			
		27 National Coffee Research Institute (NACORI)			
Vote 155 CDO	Cotton Development	01 Headquarters	CDO Headquarters, West		
		1219 Cotton Production Improvement	Acholi and East Madi, Wes Nile, South Eastern/Busogo Central, Mid-Western and Tororo/Butaleja, Pader district		
	01 Headquarters		DDA Headquarters,		
Vote 121 DDA	Dairy Development and Regulation	1268 Dairy Market Access and Value Addition	Northern Region, Northern Eastern Region, Entebbe Dairy Training School, Sout Western region		

Vote 125 NAGRC	Breeding and Genetic Development	01 Headquarters		
		02 Dairy Cattle		
		03 Beef cattle		
		04 Poultry	Aswa Ranch – Pader; Livestock Experimental	
		05 Small ruminants and non- ruminants	Station (LES) – Wakiso; Lusenke Stock Farm – Kayunga; Kasolwe Stock	
		06 Pasture and feeds	Farm – Kamuli; Njeru Stock	
		08 National Animal Data Bank	Farm – Buikwe; Sanga Field Station – Kiruhura;	
		09 Fish breeding and production	Ruhengyere Field station – Kiruhura; Rubona Field Station - Bunyangabo	
		10 ARTs	, , , , ,	
		1325 NAGRC Strategic Intervention for Animal Genetics Improvement Project		
	01 Crop Resources programme	1316 Enhancing National Food Security Through Increased Rice Production in Eastern Uganda	MAAIF, Bugiri, Bugweri	
		1425 Multi-sectoral Food Safety and Nutrition Project	MAAIF, Arua, Yumbe, Maracha, Kiryandongo, Kyenjojo, Bushenyi, Pakwatch, Kasese, Iganga, Nebbi	
		1508 National Oil Palm project	MAAIF	
Vote 010 MAAIF	03 Directorate of Agricultural Extension and Skills Management	23 Department of Agricultural Extension and Skills Management	ΜΛΛΙΕ	
		24 Department of Agricultural Investment and Enterprise Development	MAAIF	
	02 Directorate of Animal Resources	1324 Northern Uganda Farmers Livelihood Improvement Project	MAAIF, Amuria, Gulu, Omoro, Nwoya	
		1363 Regional Pastoral Livelihood Project	MAAIF, Amuria, Bukedea, Kapelebyong, Katakwi, Kumi	
	04 Fisheries Resources Programme	1365 Support to Sustainable Fisheries Development	MAAIF	
500 LGs	District Production Services	0100 Production Department – Agricultural Extension Grant	Nwoya, Omoro, Amuru, Pakwach, Nebbi, Yumbe, Maracha, Arua, Jinja, Mayuge, Bugweri, Bugiri, Namayingo, Kiryandongo, Masindi, Kasese, Bushenyi, Iganga, Kyenjojo	
		04 Production and Marketing		

Source: Author's Compilation



Plot 2 -12 Apollo Kaggwa Road P. O. Box 8147, Kampala - Uganda www.finance.go.ug

