Agriculture Sector

Semi-Annual Budget Monitoring Report

Financial Year 2018/19

April 2019

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

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ABBREVIATIONS

ACF	Agriculture Credit Facility
AEG	Agricultural Extension Grant
AIA	Appropriation in Aid
ATAAS	Agriculture Technology and Agribusiness Advisory Services
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
CoPs	Codes of Practices
DDA	Dairy Development Authority
DDEG	District Development Equalisation Grant
DLG	District Local Government
EDF	European Development Fund
ESMP	Environmental and Social Management Plans
EU	European Union
EVMG	Electronic Voucher Management Agency
EVS	Electronic Voucher System
FY	Financial Year
GoU	Government of Uganda
GRC	Grievance Redress Committees
Ha	Hectare
ICT	Information and Communication Technology
IDA	International Development Association
IFMS	Integrated Financial Management System
KCCA	Kampala Capital City Authority
Kg	Kilogram
LG	Local Government
LLG	Lower Local Government
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
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

NAADS	National Agriculture Advisory Services
NAGRC&DB	National Animal Genetic Resources Centre and Data Bank
NARO	National Agriculture Research Organization
NEC	National Enterprise Corporation
NDP	National Development Plan
NITA-U	National Information Technology Authority Uganda
NLI	National Leadership Institute
NTR	Non Tax Revenue
OWC	Operation Wealth Creation
PFI	Participating Financial Institution
PBB	Programme Based Budgeting
PBS	Programme Based System
PFM	Public Financial Management
PMG	Production and Marketing Grant
PMU	Programme Implementation Unit
PWD	Persons with Disabilities
Q	Quarter
RIA	Regulatory Impact Assessment
SOPs	Standard Operating Procedure
TA	Technical Assistance
UCDA	Uganda Coffee Development Authority
UGCEA	Uganda Ginners and Cotton Exports Association
Ug shs	Uganda Shillings
ZARDI	Zonal Agricultural Research Development Institute

FOREWORD

Over the years, the Government has implemented a number of interventions that have led to substantial progress in economic growth and national development which is now projected at 6.3% this Financial Year 2018/19 up from 6.1% attained last Financial Year 2017/18. As Government continues to pursue strategies for sustained growth and development, we should step up efforts in monitoring government programs and projects, to ensure that they are implemented in time and cost and any obstacles identified and addressed.

This report from the Budget Monitoring and Accountability Unit points to fair performance among the sectors monitored. It shows that most sectors achieved between 60%-79% of their planned semi-annual output targets. The fair performance points to the need for proper planning and commencement of procurement processes in time. This has resulted in slow absorption of funds and ultimately inadequate service delivery.

The sectors now have a quarter of the financial year to make good the promises made in terms of output and outcome targets. This is to urge all sectors to review the report and take necessary corrective actions to ensure effectiveness by end of the financial year.

Patrick Ocailap
For Permanent Secretary/ Secretary to the Treasury

EXECUTIVE SUMMARY

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 2018/19. 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 31st December, 2018.

The overall Agriculture Sector objective in the National Development Plan (NDPII)1 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 2019/202 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 and strengthening the quality of agricultural commodities; and strengthening the agricultural services institutions.

Overall performance

The approved budget for the Agriculture Sector for FY 2018/19 excluding arrears and Appropriation in Aid (AIA) is Ug shs 684.825 billion, of which Ug shs 420.569 billion (61.41%) was released and Ug shs 303.718 billion (72.22%) spent by 31st December 2018. Whereas releases from Ministry of Finance, Planning and Economic Development (MFPED) to Ministries, Departments and Agencies (MDAs) were generally timely, the pace of disbursements from sector institutions to spending departments was very slow. Front loaded funds were not spent indicating poor cash forecasting by MFPED and sectors in relation to the absorption capacity in MDAs.

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[1] GoU, 2015.
[2] Agriculture Sector Investment Plan 2015/16-2019/20.

The overall semi-annual performance of the agricultural sector during FY 2018/19 was fair rated at 61.80% The sector delivered assorted strategic inputs and value addition equipment to farmers and farmers' groups; set up demonstration sites; increased availability and accessibility to extension farmers; established water for production facilities within communities and undertook research and genetic development. The Bank of Uganda/MFPED, UCDA, LGs and CDO were the best performers, whereas the MAAIF and NARO were the worst performers by 31st December 2018.

There was increased adoption of improved farming practices by farmers countrywide due to improved access to extension services. The MAAIF excavated 113 community valley tanks, dams and ponds country wide, cleared 12,500 acres of bush, opened and improved 382km of farm access roads, ploughed and planted 8,500 acres of farm land and has trained 40 operators and technicians to sustain the intervention. Farmers accessed strategic inputs and equipment under the Agricultural Advisory Services Programme.

Performance was however constrained by low disbursement of funds to implementing agencies, slow procurements, low readiness in sector institutions to implement donor financed interventions, late submission of accountabilities, delayed distribution of inputs, drought and use of funds of FY 2018/19 to implement activities that spilled over from FY 2017/18.

Key Policy Issues

i) Flaunting of Public Financial Management (PFM) rules and regulations by agricultural sector accounting officers through accumulated arrears such as in UCDA; delayed approvals and warranting of funds; and diversion of funds such as in MAAIF.
ii) Poor performance of the NARO due to inadequate financing after the coming to the end of the donor project Agriculture Technology and Agribusiness Advisory Services (ATAAS) in FY 2017/18.
iii) Poor performance NAGRC&DB due to land wrangles, slow or none disbursement of funds from the Headquarters to the farms, and lack of breeding infrastructure and water for production.
iv) Poor accountability and duplication of activities under the two LG grants - Production and Marketing Grant (PMG) and Extension Grant.
v) The NAADS/OWC inputs were no longer sufficient to make a significant impact on production and household incomes and food security. Most districts received 2-3 commodities that were distributed to less than 10% of the farming communities. Some of the inputs were wasted due to late deliveries and inadequate mobilisation and preparation of benefiting farmers.
vi) Poor expenditure tracking and reporting in the sector, and especially for the LG grants. There was a general lack of credible data on the key performance indicators in the sector.

Recommendations

i) The MFPED should hold accountable all Accounting Officers at central and LG level to enforce the PFM regulations.
ii) The MFPED should provide bridge financing to sustain the research and breeding work that was ongoing under the ATAAS project, and identify additional sources of funding for the Agricultural Research Programme.
iii) The MFPED should enforce compliance of Accounting Officers and Heads or Departments to PFM regulations regarding timely disbursement and accountability of funds.
iv) The MFPED and MAAIF should merge the PMG and AEG into one grant for the production department in LGs.
v) The MAAIF and OWC Secretariat should review and restructure the NAADS/OWC to move away from distributing inputs to focusing funds on mechanisation and provision of value addition and agro-processing machinery and equipment.
vi) The MAAIF should collaborate with the Ministry of Lands, Housing and Urban Development, Uganda Land Commission, and Tribunals to resolve all outstanding land related conflicts in Government land for agricultural sector institutions, demarcate boundaries and title all the lands.
i) The MFPED and MAAIF should prioritise funding for conducting the Uganda Agricultural Census to produce credible data to aid planning in the sector.

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.

Although some improvements have been registered in citizens' access to basic services, their quantity and quality remains unsatisfactory, particularly in the sectors of health, education, water and environment, agriculture and roads. The services being delivered 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. Where applicable, beneficiaries are sampled to establish their level of satisfaction with the public service.

The BMAU prepares semi-annual and annual monitoring reports of selected government programmes and projects. 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.

This report presents the methodology, scope and findings from field monitoring of the Agriculture sector for the budget execution period of July to December 2018.

1.2 Sector Objectives

The overall agriculture sector objective in the National Development Plan (NDPII)[3] 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

[3] GoU, 2015.

2019/20[4] 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 and strengthening the quality of agricultural commodities; and strengthening the agricultural services institutions.

The gender and equity commitments in the sector emphasize increasing access by youth, women, persons with disabilities (PWDs) and special interest groups to farmer groups, production inputs, value addition equipment, information and training opportunities, advisory services and demonstration plots, tractor hire services and labour saving technologies at affordable prices.

These sector objectives and commitments are implemented through nine votes in the sector, 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.

[4] Agriculture Sector Investment Plan 2015/16-2019/20.

CHAPTER 2: METHODOLOGY

2.1 Scope

This report is based on the selected programmes that were monitored in the agriculture sector during FY 2018/19 semi-annual. The following cretaria 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 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.

Monitoring was undertaken in seven out of nine votes namely: CDO, MAAIF, NAADS, NAGRC&DB, NARO, UCDA and LGs. 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) Coffee 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 FY2018/19; National and Sector Budget Framework Papers; Sector project documents and performance reports in the Output Budgeting Tool (OBT), Sector Quarterly Progress

- Reports and Workplans, 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 FY2018/19

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) Inadequate information on resource use against targets in local governments due to poor planning and reporting following the introduction of Programme Based Budgeting (PBB). Reporting is mainly focused on a few high level indicators, and not comprehensively on the entire resource that is disbursed to the local governments.

ii) Inadequate sampling of beneficiaries due to limited field time, given the large number of programmes that are monitored.

CHAPTER 3: SECTOR PERFORMANCE

3.1 Overall Sector Performance

Overall financial performance

The approved budget for the Agriculture Sector for FY 2018/19 excluding arrears and Appropriation in Aid (AIA) is Ug shs 684.825 billion, of which Ug shs 420.569 billion (61.41%) was released and Ug shs 303.718 billion (72.22%) spent by 31st December 2018 (Table 3.1). This was a very good half year release and good expenditure performance for the sector. Some institutions including the CDO and UCDA received more than three quarters of their annual budget; there was low resource absorption by most votes, notably CDO, NAADS Secretariat and NAGRC&DB. Front loaded funds were not absorbed by these votes.

Table 3.1: Semi-annual Agriculture Sector Financial Performance by 31st December 2018 (billions excluding Arrears and Appropriation in Aid)

Vote/ grant	Approved budget (Ug shs billion)	Releases (Ug shs billion)	Expenditure (Ug shs billion)	% budget released	% release spent
MAAIF	147.552	83.468	61.282	57	77
DDA	5.735	3.406	2.452	59	72
NAGRC & DB	10.997	7.18	4.968	65	69
NARO	62.354	29.771	22.081	48	74
NAADS Secretariat	249.977	160.817	83.355	64	52
CDO	4.995	4.885	2.127	98	44
UCDA	73.589	64.882	62.737	85	97
LGs (District Production Services)	122.967	64.045	64.045	52	100
KCCA	6.659	2.115	0.671	32	32
Total	**684.825**	**420.569**	**303.718**	**61.41**	**72.22**

Source: MFPED, 2018; Semi-annual Vote Budget Performance Reports 2018/19; Budget Directorate, MFPED; Integrated Financial Management System (IFMS); Field Findings

Overall performance

The overall semi-annual performance of the Agricultural Sector during FY 2018/19 was fair rated at 61.80% (Table 3.2). The sector delivered assorted strategic inputs and value addition equipment to farmers and farmers' groups; set up demonstration sites; increased availability and accessibility to extension farmers; established water for production facilities within communities and undertook research and genetic development. The BOU/MFPED, UCDA, LGs and CDO were the best performers, whereas the MAAIF and NARO were the worst performers by 31st December 2018.

Table 3.2: Agricultural Sector Overall Performance by 31st December 2018

Vote	Performance (%)
Cotton Development Organisation	74.68
Ministry of Agriculture, Animal Industry and Fisheries	36.27
National Agricultural Research Organization	41.78
National Agricultural Advisory Services/Operation Wealth Creation	68.35
National Animal Genetic Resource Centre and Data Bank	56.63
Uganda Coffee Development Authority	79.91
Local Governments	75.00
Average sector performance	**61.80**
Agricultural Credit Facility	76.23

Source: Field findings

Performance was however constrained by low disbursement of funds to implementing agencies, slow procurements, low readiness in sector institutions to implement donor financed interventions, late submission of accountabilities, delayed distribution of inputs, drought and use of funds of FY 2018/19 to implement activities that spilled over from FY 2017/18.

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 provide subsidized medium and long term financing to farmers/firms engaged in agriculture, agro-processing and trade. The ACF terms of conditions have been amended progressively over the years with the latest Memorandum of Agreement signed in June 2018[5]. The GoU makes an annual contribution of Ug shs 30 billion to the revolving fund, commercial banks contribute 50% and Micro Deposit Taking Institutions (MDIs) and Credit Institutions (CIs) contribute 30% of the capital value of each loan to an eligible borrower.

The implementing agencies are MFPED, Bank of Uganda (BoU) and Participating Financial Institutions (PFIs). The terms of the ACF are: interest chargeable by the PFIs is 12% per annum while working capital for grain trade does not exceed 15% per annum; facility fees charged by PFIs not to exceed 0.5% of the credit facility amount; operating costs not to exceed 20% of total project costs; the maximum credit amount to an eligible borrower not to exceed Ug shs 2.1

[5] GoU, 2018.

billion and working capital for grain trade not to exceed Ug shs 10billion. Block allocations of to Ug shs 20 million were introduced for micro borrowers without collateral.

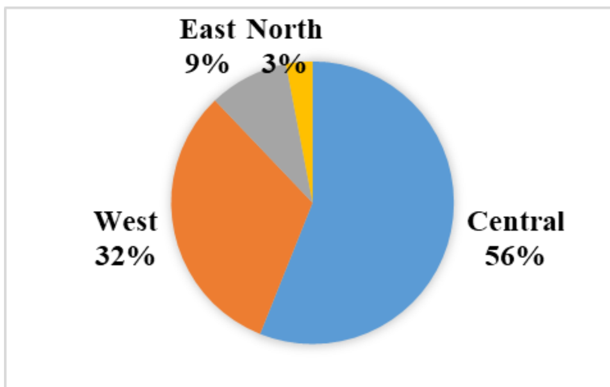
Cumulatively between FY 2009/10 and 31st December 2018, the GoU has remitted Ug shs 141.926 billion to the BoU ACF Escrow Account, of which Ug shs 212 million was disbursed in FY 2018/19 half year. The cumulative total disbursements by GoU and PFIs to 492 loan applications (76%) out of the 647 loan applications received amounts to Ug shs 307.803 billion (GoU – Ug shs 155.221 bn and PFIs – Ug shs 152.58 bn)[6].

The opening balance on the BoU Escrow Account on 1st July 2018 was Ug shs 61,656 billion. Remittances from GoU to the ACF capital account amounted to Ug shs 212.129 million. During the half year, the total repayments from PFIs totaled Ug shs 14.420 billion, while disbursements to projects amounted to Ug shs 20.427 billion. By 31st December 2018, the fund balance/cash available was Ug shs 55.649 billion. The commitments amounted to Ug shs 14.294 billion, while the pipeline projects were worth Ug shs 51.012 billion (*BoU data, March 2019*).

3.2.2 Performance

During the half year FY 2018/19, a total of 66 farmers/firms received new ACF loans (totaling Ug shs 20.427 billion), of which Ug shs 3.232 billion (15.83%) was under the block allocations extended to 19 farmers/firms.

Figure 3.1: Regional Distribution in Access to ACF by Beneficiaries by 31st December 2018



Source: Field findings

Regional inequalities in access to the ACF persisted and worsened compared to FY 2017/18 as beneficiaries in the Central region attracted more than half of the disbursed loans followed by the Western region by 31st December 2018 (Figure 3.1). The North and East had insignificant access to the ACF. The regional distribution of ACF in FY 2017/18 was Central (50%), Western (24%); Eastern (16%); and Northern (10%)[7].

All the sampled farmers received the ACF loans as listed in the BoU schedules. The farmers undertook several investments ranging from trading grain, procurement and installation of agro-processing facilities and maize mills, procurement of high grade animals; importation of hi-tech machinery for processing feeds, foods, fruits, grains and other products; establishment of warehouses; procurement of tractors and other farming implements and general expansion of farm operations.

[6] BoU, 2018.

[7] MFPED Annual Budget Monitoring Report 2017/18.

Commercial tomato production in green house that was established using ACF on Mr. Kasaijja's farm in Masindi District

Mr. Kasaijja's farm located in Bubanda II village, Ntooma parish, Bwijanga sub-county Masindi District expanded rice cultivation from 5 to 50 acres after acquiring a tractor and increased production from 30 bags of rice in FY 2017/18 to 300 bags of rice by 31st December 2018.

The main challenges were: poor quality of herbicides, fertilizers, equipment and seeds that reduced the profitability of the enterprises. The funds disbursement modality that did not allow drawing funds against a credit line and in line with the production cycle. Interest was being paid on funds that were not productive and not yet due for use by the beneficiary.

Kazire Health Products Ltd in Luti village, Nyamitanga Division, Mbarara municipality in Mbarara District accessed Ug shs 1.3 billion in FY 2018/19 that was used to procure a generator and establish additional storage facility. The company had just completed a previous loan that involved procurement of crushing and chilling machines that more than doubled the production levels. The additional machinery led to enhanced sanitation and hygiene and human safety in the milling spaces, with less workers employed due to mechanization. From 140 permanent workers in FY 2016/17, the company had 30 permanent workers (10 males and 20 females) and on average 75 casual labourers

Agri-Net Uganda Limited located on Mile 8 Tororo-Jinja road in Tororo District accessed a line of credit worth Ug shs 100 million, out of which Ug shs 90 million was utilized for grain trade by 31st December 2018. The company had contracts with 5,270 farmers who supplied the grain under the ACF agreement. They employed six permanent staff (two females and 5 males) and 25 casual labourers (10 males and 15 females) to handle the grain business. The main challenges where the additional costs of processing the loan (life insurance 0.5%, company evaluation Ug shs 2 million, audit fees Ug shs 1 million) that made the facility less profitable; and limited information and awareness about the ACF in Eastern Uganda.

Grain procured and packaged using ACF funds at the Eastern Rice Company Limited in Tororo District

Eastern Rice Company Ltd in Malawa A. village, Papoli parish, Magola sub-county, Tororo District accessed Ug shs 5 billion that was used in trading grain. The main challenges were: the poor quality of rice delivered by farmers due to inadequate guidance from extension staff on good farming methods, use of water for production and proper post-harvest handling; and price fluctuations that affected profitability of the business.

ACF financed imported compact freezers and compressor machine in box packages awaiting completion of housing structure to be installed at HMH-Rainbow Ltd in Luwero District

The ACF has expanded employment opportunities to Ugandans. For example, due to the procurement of additional machinery and equipment using the ACF, **HMH-Rainbow Ltd** (Yo-Kuku) in Luwero District procured from local farmers, processed and sold 450,000 poultry birds on a monthly basis. The firm employed 400 workers (40% female and 60% male);

Sugar cane cultivation and production by **Uganda Farmers Crop Industries Limited** in Buikwe District increased after the procurement of 12 tractors, excavator, grader, three tippers and four trucks. By 31st December 2018, the sugar estate employed 700 workers of whom 466 (66.57%) were female and 234 (33.43%) male.

Arise and Shine Maize Millers Ltd in Kawempe Ttula village, Lukadde parish, Nansana Municipality that accessed Ug shs 2.8 billion was employing 115 employees (12 females and 103 males).

ACF financed grain being off loaded and stored at Arise and Shine Maize Millers Ltd in Wakiso District (right), and ongoing works for additional storage capacity at Biyinzika Enterprises in Wakiso District

Challenges

i) Loss of Government funds through poor scrutiny of proposals resulting in an increasing number of delinquent loans; the number of delinquent loans had increased from six (totaling Ug shs 2.122 billion) by 30th June 2014[8] to 15 (worth Ug shs 3.127 billion) by 30th June 2018[9].

ii) The BoU lacked an annual work plan and targets for ACF which made tracking of performance difficult.

iii) Lower production and profits from farm investments due to lack of extension services and input and machinery quality assurance by MAAIF and agencies. There was no collaborative linkage between the ACF programme and technical/extension staff within the local governments and MAAIF to quality assure the size and types of equipment and machinery, quality of seed and chemicals and give regular advice to farmers.

iv) Less profitability of investments due to delayed processing of loan applications by up to one year.

Recommendations

i) The MFPED should undertake an evaluation of ACF to access performance of all the projects under implementation; and collaborate with BoU and PFIs to strengthen mechanisms for proposal scrutiny and supporting farmers during implementation.

ii) The BoU in collaboration with MFPED and PFIs should prepare annual work plans and targets for the ACF which would form a basis for monitoring performance.

iii) The MFPED and BoU should establish a framework of collaboration with MAAIF and LGs to provide advisory services, monitor and supervise the agricultural investments under the ACF; and leverage other partners to provide complementary services like quality affordable equipment.

iv) The BoU should strengthen supervision of PFIs to ensure that loan applications are expeditiously processed within no more than three months from date of submission of application,

Overall performance of the Agricultural Credit Facility

The overall performance of the ACF in FY 2018/19 half year was good rated at 76.23% (Table 3.3). The lower performance was due to a combination of factors: the rather long period (ranging between three to 12 months) between submission of an application and access by the beneficiary; the high interest rate and short loaning period for the grain facility; long period taken by firms to import machinery; inadequate operating funds; and less funds disbursed to beneficiaries than requested for due to inadequate collateral. All these factors lowered the profit of the ACF investments.

[8] BoU, 2014.
[9] BoU, 2018a.

Table 3.3: Performance of the Agricultural Credit Facility by 31st December 2018

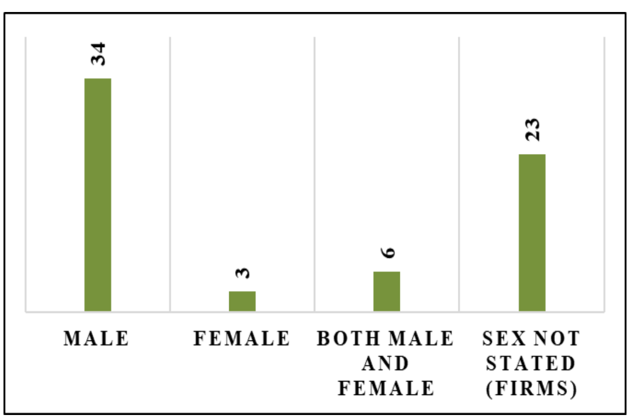
Output	Annual Budget (Ug shs 000')	Cum. Receipt (Ug shs 000')	Annual Target	Cum. Achieved Qty	Physical performance Score (%)	Remark
Tractor procured and green house for vegetables established on Mr. Kasaijja farm in Masindi district (Number of items)	90,000	90,000	2.00	2.00	0.29	All ACF terms were adhered to.
Storage facility constructed and Generator procured and installed at Kazire Health Products Ltd in Mbarara district (number of items)	1,300,000	1,300,000	2.00	1.40	2.89	The 500KVA generator was procured and installed; the storage facility was 40% complete.
Grain traded by Mr. Tumuramye in Kabale district (activity)	500,000	500,000	1.00	1.00	1.59	The short lending period of 24 months and high interest rate were key challenges.
Farm improvements established on Mr Rukundo's farm in Rukungiri district - 1 spray race, 1 biogas plant, 4 bunkers, 1 tank for bio-celery plus piping, 2 dams, 1 silage pit, 10 high grade animals, bush cleared (number of activities/items)	90,000	90,000	21.00	17.00	0.23	All planned activities done except for the dams, spray race and bush clearing due to inadequate funds.
Grain traded by Agri-Net Uganda Limited in Tororo district (MT)	100,000	100,000	150	100	0.21	Challenges of lengthy loan processing period of year; untimely disbursements, high interest

						rate and loss of profits as funds were accessed off season for grain trade.
Grain traded by Eastern Rice Company Limited in Tororo district (MT)	5,000,000	5,000,000	3500	3500.	15.88	1,500 MT of maize and 2,000MT of rice grains were traded.
Grain traded by Arise and Shine Millers Limited (MT) in Wakiso district	2,800,000	2,800,000	3000	4000	8.89	Cost of borrowing was higher due to additional charges such as URA stamp duty 1% equivalent to Ug shs 28 m that was paid.
Machinery and equipment procured and infrastructure repaired by Uganda Farmers Crop Industries Ltd in Buikwe district - 1 grader, 1 excavator, 5 tractors, 3 tippers, 4 trucks, 2 bridges, farmer fields opened (Number of equipment/activities)	5,000,000	5,000,000	17.00	23.00	15.88	All equipment was procured except for the grader; the firm opted to buy 12 second hand tractors instead of 5 new ones. Nine months spent processing the loan.
Two compact compressors and one compressor procured by HMH - Rainbow Limited in Luwero district (Number)	4,800,000	2,000,000	3.00	3.00	15.25	The company procured 5,000MT for chicken feed.
Warehouse constructed, milling huller procured and grain traded (1000MT) by Mr. Irumba in	1,200,000	1,200,000	1002	600.8	2.29	600MT of grain was procured and warehouse construction was 80%

Kyankwanzi district (MT and number of investments)						completed; loan processing took more than a year due to delays in KCCA to process the deed plan for collateral; high interest rate was a challenge.
Mr Nsengiyunva farm in Kiboga district expanded - 3 paddocks, 100 bulls, 15 cows, 160 acres of bush cleared (acres and number of items)	100,000	100,000	278	277	0.32	All planned investments were made except for one paddock that was not established due to inadequate funds.
Grain traded and two silos and maize mill procured by Biyinzika Enterprises Limited (number of investments)	10,500,000	10,500,000	4.00	1.50	12.51	Over 8000MT purchased; machinery was still under procurement; civil works were ongoing for the foundation base upon which the machinery would be installed.
Programme Performance	**31,480,000**	**28,680,000**			**76.23%**	

Source: Field findings

Figure 5.2: Access to ACF by Business Proprietors by Gender by 31st December 2018



Source: Field findings

Gender

Gender inequalities still persist in access to the ACF, with less females accessing the credit facility compared to males. Key constraints to accessing the ACF by female entrepreneurs were: financial illiteracy; lack of key assets like land where investments can be undertaken, and lack of capital to finance operations of the business

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 strategic objective of CDO is to increase cotton production and quality with the aim of contributing to the national economy through increased incomes. The CDO has one programme - Cotton Development and two sub-programmes - 01 Headquarters, and Project 1219 Cotton Production Improvement. Both sub-programmes were monitored and the areas that were sampled are presented in Annex 1.

Cotton Development Programme

The approved budget for Cotton Development Programme in FY 2018/19, excluding Appropriation in Aid (AIA) is Ug shs 4.994 billion, of which Ug shs 4.885 billion (98%) was released and Ug shs 2.077 billion (43%) spent by 31st December 2018.

3.3.2 Headquarters

Background

Under the Headquarters sub-programme, the CDO provides services to 65 cotton growing districts through 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 approved budget for Headquarters sub-programme for FY 2018/19 is Ug shs 583.597 million, of which Ug shs 519.032 million (89%) was released and Ug shs 268.715 million (52%) spent by 31st December 2018. This was a very half year good release and poor expenditure performance. The recurrent budget that was front loaded was not absorbed.

Performance

During FY 2018/19 semi-annual, the CDO provided cotton planting seed, extension services and other inputs to farmers in the cotton growing areas. Farmer mobilization and sensitization was undertaken and mechanization services were offered to enhance land opening in readiness for cotton planting. In the 65 cotton growing areas, the CDO supplied 2,648 Mt of seed, established 4,182 one-acre demonstration sites, provided technical support to 38 prison farms, established about 6,500 acres under seed multiplication, provided assorted input and trained the farmers.

All the farmers that were monitored were able to access the CDO inputs at the regional offices or from agents. The main challenges faced at farm level were: low production due to pests and diseases and ineffective pesticides; drought; inadequate tractors and ploughs for opening land and lack of spray pumps. The detailed performance of the Headquarters sub-progamme is presented in Table 5.4.

Challenge: i) Lower production and productivity due to harsh climatic conditions.

Recommendation: i) The MAAIF, NARO and LGs should promote adoption of simple appropriate irrigation technologies by farmers.

3.3.3 Cotton Production Improvement

Background

In 2012, CDO commenced the Cotton Production Improvement sub-programme to establish the first government seed processing plant in Pader District. In FY 2013/14, the CDO acquired 16 acres of land in Pajule sub-county. Construction of the first phase of the facility was undertaken during FY 2014/15 to FY 2017/18. The second phase works commenced in FY 2017/18.

The approved budget for the sub-programme for FY 2018/19 is Ug shs 4.994 billion, of which Ug shs 4.885 billion (98%) was released and Ug shs 2.077 billion (43%) spent by 31st December 2019. This was very a good release, but poor expenditure performance. The funds that were frontloaded for this sub-programme were not absorbed.

Performance

The phase 2 works were completed and the cotton seed dressing plant was in operation by 30th January 2019. The completed certified works were: front office block and weighbridge; raw seed cotton and unprocessed cotton seed stores; cyclone block and toilet block. The installation of the decommissioned machines from the CDO dressing stations in Lira, Kachumbala and Masindi and the imported machinery was completed. The delinting, grading, treating and packaging of seed had commenced, although partially.

The delinting machines were delivered with only two blank rollers (polythene as testing materials) that were not customised in terms of labeling seed variety, quantity, acreage, germination percentage and planting rate. These were inadequate and further packaging of seeds was constrained due to lack of these materials. The detailed performance of the Cotton Production Improvement sub-programme is presented in Table 3.4.

Completed store (left) and front office block and weigh bridge in operation (right) at the CDO Cotton Seed Processing Plant in Pader District

Challenges

i) Contamination with moisture and foreign bodies and wastage of seed cotton due to inadequate storage capacity. The CDO constructed a temporary shade to alleviate the problem which was already filled to capacity.
ii) Absence of mechanical workshops to repair machines expeditiously when there are mechanical breakdowns. This leads to loss of processing time.
iii) Inadquate power to operate the machines.
iv) Staff inefficiency due to lack of key infrastructure such as staff quarters. Staff report late and are not easy to supervise when they live in remote towns

Recommendations

i) The CDO should prioritise funds for providing additional key infrastructure and equipment at the Seed Dressing Station, particularly stores for both processed and unprocessed cotton, staff accommodation facilities and a standby generator.
ii) The CDO should establish a functional mechanical workshop at the seed plant premises.

Overall Performance of the Cotton Development Programme

The overall semi-annual performance of the Cotton Development Programme during FY 2018/19 was good rated at 74.68% (Table 3.4) based on seven out of the 10 regions that were monitored. Assorted cotton targeted inputs and extension services were made available to farmers; farmer mobilization was undertaken and demonstration sites were established. The phase 2 works at the Cotton Seed Dressing Station in Pader District were completed and the plant was functional.

However, the seed uptake was lower than targeted due to intermittent dry spells during the planting period (June to August) which affected crop establishment. For the same reason, some seed growers differed multiplication of seeds to the next season when there would be adequate rains. The dry spells during the planting period hampered mechanized ploughing.

At the cotton seed dressing station, some of the planned works for phase 2 where not undertaken due to inadequate funding and were differed to later phases. The regional offices received less pesticides, herbicides and pumps than what was target which reduced input availability to farmers.

Table 3.4: Performance of the Cotton Development Programme by 31st December 2018

Output	Annual Budget (UG Shs)	Cum Receipt Per Output (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)
Output: 01 Provision of cotton planting seeds (MT)	266,797,653	238,797,653	2,800	2,648	2.187
Output: 02 Seed multiplication No. of seed growers registered and	183,800,000	167,735,251	6,000	5,200	1.431

trained)					
Output: 03 Farmer mobilisation and sensitisation for increasing cotton production and quality (No. of Demo plots)	118,000,000	102,500,000	4,000	4,182	0.967
Output: 04 Cotton targeted extension services (No. of extension workers)	199,000,000	78,000,000	400	390	0
Output: 05 Provision of pesticide and spray pumps (districts)	70,000,000	32,000,000	66	65	0
Output: 06 Mechanisation of land opening (acres)	15,000,000	10,000,000	-	69,393	0
Output: 72 Organize construction of a bale shed, storm water drainage and drive ways at the Seed Processing Plant in Pader (No. of investments)	3,830,000,000	3,785,000,000	3	1	10.588
Output: 77 Procure new seed delinting machine and transfer machinery from old sites to the new seed processing site in Pader	581,000,000	581,000,000	2	1	3.333
Administrative (Activities)	372,390,202	50,400,000	23	20	3.052
Output 05: Provision of pumps - motorised (number)	201,600,000	143,100,000	81	18	1.469
Output 05: Provision of pumps - manual (number)	170,400,000	1,208,945,000	3,408	2,862	1.397
Output: 01 Provision of cotton planting seed (bags/MT)	1,247,898,000	2,635,172,500	499,150	483,578	10.228
Output 05: Provision of pesticides (units)	4,585,292,000	33,182,000	1,505,900	855,038	37.129
Output: 02 Seed multiplication - herbicides (units)	78,880,000	281,880,000	4,845	2,186	0.646
Provision of fertilizer.	246,240,000	10,000,000	4,104	4,698	2.018
Motorcycles	35,000,000	-	17	4	0.236

Total	**12,201,297,855**	**-**	**-**	**-**	**74.680%**

Source: Field findings

Overall Vote Performance

The overall performance of the CDO by 31st December 2018 was good (74.68%). The release performance was very good, but resource absorption was low. The front loaded funds were not absorbed. Seeds, pesticides, herbicides, spray pumps and extension services were made available to farmers; however, uptake of the inputs was lower due to harsh climatic conditions. Planting was differed by farmers in some areas to later seasons. The construction of phase 2 works at the Cotton Seed Dressing Station were completed and the plant had commenced operations. The inadequacy of stores for processed and unprocessed cotton and lack of staff quarters were major challenges.

3.4 Local Governments

3.4.1 Introduction

The Local Governments (LGs) have responsibility for all decentralized services in the production sector. The LGs have one programme District Production Services and three sub-programmes – District Production Services (0182), District Commercial Services (0183) and Agricultural Extension Services (0181).

The semi-annual monitoring fully covered the programme. The districts visited are presented in Annex 1. The approved budget for the LG Production Sector in FY 2018/19 was Ug shs 122.967 billion, of which Ug shs 64.045 billion was released and fully spent by 31st December 2018. This was very good release and expenditure performance.

District Production Services

3.4.2 Production and Marketing Grant (including Commercial Services)

Background

The Production and Marketing Grant (PMG) supports implementation of MAAIF related functions in all Local Governments (LGs). Effective from FY2010/11, the PMG aims to: i) strengthen disease, pest and vector control and quality assurance services; and ii) strengthen the agricultural statistics and information system in local governments. The LGs spend 55% of the grant on development (Non-wage) activities particularly infrastructure and 45% on recurrent expenses. In addition, 30% of the grant is spent on commercial related activities.

A total of 18 districts listed in Annex 1 were monitored to assess the performance of the District Production Services programme.

Performance

The overall semi-annual performance of the PMG during FY 2018/19 was good rated at 88.5% (Table 3.5). Good performance was associated with timely receipt and disbursement of funds and implementation of planned activities. Procurements were ongoing for some of the capital items.

Table 3.5: Performance of the Production and Marketing Grant by 31st December 2018

Output	Annual Output Budget (Ug shs)	Cum Receipt Per Output (Ug Shs	Annual Planned Qty or Target	Cum. Achieved Qty	Physical performance Score (%)
Fish fry centres operationalised (number)	25,000,000	0	12	0	0.00
Farmers trained (number)	59,509,120	31,572,881	4,874	2,102	4.70
Irrigation schemes established (number)	50,500,000	0	2	0	0.00
Demonstration gardens for crop/Fish/Bees/dairy established/maintained (number)	107,313,954	11,212,000	83	32	10.42
Animal and crop disease surveillances conducted (No. of visits)	31,038,199	19,972,003	260	129	2.32
District farm gardens/ plantations established/maintained (No. of gardens)	37,481,840	19,320,840	2	2	3.64
Plant clinics established and maintained (No. of clinics)	62,496,983	23,919,536	3	2	6.07
Tsetse fly traps procured/distributed (No. of traps)	6,644,688	1,772,344	180	85	0.65
Bee hives procured and installed (No. of bee hives)	11,577,036	1,743,000	28	6	1.12
Sensitisation/inspections and monitoring conducted (No of visits)	158,819,705	77,640,761	1,015	540	15.43
Slaughter slabs constructed/ rehabilitated/slabs monitored	50,260,087	1,644,282	10	6	4.88

(No. of slabs)					
Animals vaccinated and treated (number)	14,560,000	3,654,800	95,558	21,675	1.28
Vaccination doses procured (Number of doses)	12,844,184	4,157,322	727	385	1.25
Vehicles/Motor cycles procured and Maintained (No.of vehicles)	51,195,855	16,141,122	24	10	4.97
Office & field equipment procured and maintained (number)	193,665,272	28,796,110	134	36	18.81
Consultative meetings to MAAIF /Radio talk shows Conducted (No. of visits/meetings)	50,060,162	27,556,000	140	69	4.35
Business inspections conducted (number of businesses)	95,292,816	34,292,245	2,298	700	7.83
National and regional level workshops conducted (No. of workshops)	11,286,000	5,123,000	16	5	0.75
Programme performance	**1,029,545,901**				**88.5%**

Source: Field findings

Challenges

i) High crop losses and lower production and productivity due to: a) drought and untimely planting associated with lack of reliable rain forecasts, b) Inadequate and low skilled production sector staff/extension workers, c) high prevalence of pests and diseases.
ii) Partial implementation of some planned activities due to: a) late releases and disbursement of funds from the district collection account to the implementing department associated with delayed accountabilities for previous funds and approvals by accounting officers on the systems, b) confusion on which funds were meant for which activities as the advisory from MFPED came late.
iii) Poor programme supervision due to lack of transport means for extension workers.

Recommendations

i) The MAAIF and LGs should retool all the district production staff and extension workers through refresher courses and facilitate them with transport means.

ii) The MFPED should hold accountable LGs to ensure that funds are disbursed timely to implementing departments and reporting is done.
iii) The MAAIF should collaborate with the Meteorology Department to provide accurate weather forecasts to farmers.

3.4.3 Agricultural Extension Grant

Background

Implementation of the Agriculture Extension Grant (AEG) interventions started in FY 2017/18 under the Directorate of Agricultural Extension Services in MAAIF, with finances channeled to districts through the ministry. In FY 2018/19, the programme was fully decentralized with LG Production Department with finances channeled directly from MFPED to the district collection accounts. Implementation guidelines where issued to LGs by MAAIF with a conditionality that 30% of releases were for district level activities and 70% for sub-county level activities. The approved budget for the AEG for LGs for FY 2018/19 is Ug shs 29.462 billion.

Performance

The overall semi-annual performance of the Agricultural Extension Grant in FY 2018/19 was fair rated at 61.51% (Table 3.6). A key challenge in performance tracking was that most districts did not have proper records on funds disbursement and utilization and actual physical performance especially at the LLG level. Hence, fewer districts visited were included in the analysis.

Some of the activities that were implemented by the LGs included: farmer registration and profiling, creation of multi-sectoral innovation platforms for the strategic commodities, setting up of farm level demonstration sites, collection of agricultural data and training. All districts had not yet concluded the capital procurements.

Table 3.6: Performance of the Agricultural Extension Grant by 31st December 2018

Output	Annual Budget (Ug Shs)	Cum.Receipt (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical Performance Score (%)
Exhibitions at the 2019 National Agricultural show conducted (enterprises exhibited)	4,600,000	3,066,667	4.00	1.00	0.26
Commodity value chain development innovation platforms held (Number of workshops)	34,748,000	18,040,667	95.00	12.00	1.28

Agricultural extension services supervised and monitored by district leaders (quarterly)	10,112,000	5,056,000	4.00	2.00	1.54
Demonstration sites and model farms set up for priority enterprises (Number of sites)	78,998,065	26,649,500	175.00	90.00	12.00
Extension kits and inputs for selected priority enterprises procured ((No of enterprises)	86,082,540	16,038,782	5.00	0.30	4.21
Farmers registered and a farmers register compiled (Register)	42,614,370	15,276,783	3.00	1.10	6.47
Agricultural statistics collected and analysed on quarterly basis (quarters)	39,291,600	10,619,210	12.00	2.60	4.78
The Presidential four acre model implemented (number of model households)	7,455,722	3,727,861	20.00	5.00	0.57
Extension workers facilitated to do monitoring activities (quarters)	17,179,389	8,589,695	5.00	3.00	2.61
Staff trained in various technical aspects (number of trainings)	24,610,000	12,240,000	8.00	3.00	2.82
Communications done for value chain actors (radio announcements and talk shows)	17,025,600	6,356,400	241.00	60.10	0.00
Farmers trained in improved agronomic practices and advisory services provided (number)	131,819,849	60,612,728	110,118.00	21,344.00	8.44

Study tours and farmer exchange visits conducted (number)	35,623,278	18,790,800	81.00	14.00	1.77
Assorted inputs procured - fertilisers, feeds, planting materials (lots)	101,878,787	50,939,394	9.00	4.00	13.75
Total	**658,456,337**				**61.51%**

Source: Field findings

There was increased adoption of improved farming practices by farmers countrywide due to improved access to extension services arising from the deepening of the single spine extension system in the local governments. This is likely to lead to enhanced agricultural production and productivity by the end of the financial year.

Programme implementation in Kayunga, Nebbi, Zombo, Oyam and Kamuli districts was slow due to delayed releases and disbursement of funds from the district collection account to the implementing department and late procurements. This was attributed to the challenges in transitioning from Tier 2 to Tier 1 on the IFMS, lengthy process of sourcing capable suppliers and contractors and low capacity among district officers to expedite the requisitions and approval processes on the systems.

In Tororo District, out of Ug shs 328.721 million that was released for the Production Sector, only Ug shs 149.980 million (45.62%) was spent by 31st December 2018. Under expenditure was due to late submission of accountabilities and requisitions from the LLGs to trigger disbursement of funds, staff shortage to implement the programmes and delayed initiation of procurements by the implementing departments.

In some districts like Kiryandongo, it was difficult to assess the performance of the AEG as funds had been aggregated as the Sectoral conditional Grant, inclusive of the PMG and the commercial services. This resulted into aggregated indicators and targets of performance and in some cases duplication of outputs.

Challenges

i) Poor accountability and duplication of activities under the two LG grants - Production and Marketing Grant (PMG) and Agricultural Extension Grant. They should be merged into one grant with clear activities. The districts also receive another grant District Development Equalisation Grant (DDEG) that addressed the same activities as PMG and Extension Grant, leading to use of funds from different sources for the same activities.
ii) Low performance and limited impact of the AEG due to the thin spread of resources to over 17 outputs as listed in the MAAIF implementation guidelines; inadequate staffing in the LLGs; and delayed accountabilities and requisitions from the sub-counties to the district.
iii) Loss of planting materials due to harsh climatic conditions.

Recommendations

i) The MFPED and MAAIF should merge all similar grants – PMG, Extension, DDEG – into one grant for the production department in LGs.
ii) The MAAIF should prioritise the outputs to be focused on and financed by the AEG for more impact.
iii) The MFPED should disburse the funds appropriated to the sub-counties directly to the sub-county accounts.

Overall performance of the District Production Services Programme

The overall semi-annual performance of the District Production Services Programme during FY 2018/19 was good (75%), taking into consideration the outputs delivered under the PMG and AEG. Farmers had increased access to extension services which led to improved adoption of good farming practices and production.

Overall Vote Performance

The Local Government Vote performance was good (75%) by 31st December 2018. Farmers were trained in improved agronomic practices; crop, animal, fisheries and apiary demonstration sites were set up to enhance farmer learning; key agricultural infrastructure such as slaughter slabs and plant clinics were established; animal vaccinations were done and extension services were delivered. Performance tracking was constrained by lack of credible data in the sector arising from poor reporting and expenditure tracking.

3.5 Ministry of Agriculture, Animal Industry and Fisheries

3.5.1 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. Five out of the six programmes were monitored, the exception being Policy, Planning and Support Services.

Agriculture infrastructure, Mechanization and Water for Agricultural Production Programme

3.5.2 Improving Access and Use of Agricultural Equipment and Mechanization

Background

The Government of Uganda (GoU) is implementing the Improving Access and Use of Agricultural Equipment and Mechanisation sub-programme that aims to enhance agriculture production and productivity through excavation of water for production facilities, bush clearing and opening of farm roads. The overall targets for the three-year period (07/01/2015-06/30/2018) were 500 valley tanks excavated/rehabilitated, 5000 acres of bush cleared and 2000 farm roads opened up. During FY 2018/19, the project was granted a two-year extension to enable completion of the planned outputs.

The focus in FY 2018/19 was to establish community water for production facilities to mitigate the problem of low agricultural production and productivity due to harsh weather conditions. The planned activities for FY 2018/19 included: Procurement/establishment of 6 new sets of heavy equipment; revamping Namalere Training Centre; capacity building of MAAIF staff, farmers, engineers, and operators and farmer organisations; awareness creation about the equipment availability and maintenance of machinery.

The approved budget for the sub-programme for FY 2018/19 is Ug shs 27.340 billion, of which Ug shs 17.364 billion (64%) was released and Ug shs 12.366 billion (71%) spent by 31st June 2018. This was very good half year release and good expenditure performance. The front loaded funds were not spent.

Performance

The overall semi-annual performance of the Improving Access and Use of Agricultural Equipment and Mechanisation sub-programme during FY 2018/19 was fair rated at 61.41% (Table 3.7). The MAAIF constructed and rehabilitated valley tanks and dams and fish ponds, cleared bush and ploughed farmers' and communities' fields across the country.

Table 3.7: Performance of the Improving Access and Use of Agricultural Equipment and Mechanisation Sub-programme by 31st December 2018

Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Qty	Physical Performance Score (%)
Output 010583 Valley Tank and Other Facilities Construction: Valley tanks, dams and fish ponds constructed and de-silted (number)	11,160,000,000	9,367,201,548	160	84	27.02

Output 010583 Valley Tank and Other Facilities Construction: Bush cleared (acres)	480,000,000	280,000,000	5500	12000	1.86
Output 010583 Valley Tank and Other Facilities Construction: Farm Access Roads opened and improved (Kms)	465,432,000	263,000,000	100	100	1.80
Output 010583 Valley Tank and Other Facilities Construction: Opening and ploughing of bush cleared areas undertaken (acres)	25,000,000	5,000,000	2000	8500	0.10
Output 010577 Purchase of specialised machinery and equipment: Procurement and payment of the of 5 sets of heavy equipment and accessories, 6 pickups, 2 drilling rigs, 10 tractors, 2 mobile workshop vans undertaken (no. of items)	13,381,835,678	6,500,000,000	25	7	29.86
Output 010572 Government Buildings and Administrative Infrastructure: 2 regional Centres in Agwata and Buwama and Namalere referral mechanisation workshop constructed/rehabilitated (number)	120,000,000	120,000,000	3	1	0.00
Output 010577 Purchase of specialised machinery and equipment: Maintenance of equipment and vehicles (number)	200,000,000	130,000,000	60	48	0.77
Programme Performance	**25,832,267,678**	**16,665,201,548**			**61.41%**

Source: Field findings

However, performance was lower as procurements of most equipment and machinery were in initial stages and construction/rehabilitation of the two regional Centres in Agwata and Buwama and Namalere referral mechanisation workshop had not started by 31st December 2018. Inspection, verification, designs and bills of quantities were initiated for the regional centres.

MAAIF excavated community dam with unlevelled soil piles in Buikwe District (left), and valley dam without means of drawing water and troughs in Kaganja village Nakasongola District (right)

One of the MAAIF machines that stalled in Nebbi District for over a month due to lack of spare parts, (right) and incomplete dam at the National Farmers Leadership Centre in Kampirigisa village, Mpigi District

Challenges

i) Except in a few cases, all the dams and valley tanks were not in use due to lack of water pumps, pipes and troughs to draw and use the water from the deep structures. Access by the communities to the water was also hindered by the huge piles of excavated soils that were not leveled but left on the sides of the infrastructures.

ii) High exposure of humans and animals to death in the water for production facilities which were not fenced.

iii) Cases of incomplete structures were noted in some districts such as in Mpigi where the machinery failed to excavate during the rain seasons.

iv) Delay in completion of infrastructures on schedule due to breakdown of the machines and poor maintenance.

Recommendations

i) The MAAIF should complete installation of the water pumps, piping and troughs on the water for production facilities that were established.
ii) The MAAIF should collaborate with the LGs and communities to ensure that all the facilities are fenced.
iii) The MAAIF should monitor and ensure completion and quality for all the infrastructures that were established.
iv) The MAAIF should fast track establishment of the regional mechanical workshops to reduce time and costs of maintaining the machines.

Crop Resources Programme

3.5.3 Agricultural Cluster Development Project

Background

The Agriculture Cluster Development Project (ACDP) is a World Bank/GoU funded project that aims to raise on-farm productivity, production and marketable volumes of maize, beans, cassava, rice and coffee in specified geographical clusters covering 40 districts. Implemented by MAAIF, the project is estimated to cost US$ 248 million to be contributed as an International Development Association (IDA) Credit (US$ 150 million) and GoU counterpart funding (US$ 98 million) over the period 9th April 2015 to 31st March 2022[10].

The project was designed to start as a pilot in FY 2016/17 in five districts (Iganga, Amuru, Nebbi, Kalungu and Ntungamo) involving provision of subsidized agro-inputs to 450,000 farm households through electronic vouchers issued by an Electronic Voucher Management Agency (EVMG); provision of water for production to promote irrigated rice varieties and matching grants to farmers and infrastructure to enhance market linkages, post-harvest handling, storage and value addition.

Although the project was approved and the financing agreement signed by Government in September 2016, it only became effective on 23rd January 2017. Delays in declaration of project effectiveness arose due to low readiness of MAAIF to meet the prior conditions of establishing a Coordination Unit, developing a project implementation manual, designing e-Voucher system and enhancing staffing capacity.

[10] World Bank, 2015.

Performance

The semi-annual performance of the Agricultural Cluster Development Project during FY 2018/19 was poor rated at 32.71% (Table 3.8). Underperformance was due to delayed completion of the e-voucher system (EVS) by the EVMG that resulted in implementing the project in one out the five pilot districts; and delayed initiation of procurements and contracting. The EVS was formally launched in Kalungu district in November 2018. A total of 148 farmers (17%) out the 866 farmers enrolled on the EVS in Kalungu District benefitted from the input subsidies. The Coordination Unit was established and was fully functional.

Table 3.8: Performance of the Agricultural Cluster Development Project by 31st December 2018

Output	Annual Budget (Ug shs 000')	Cum. Receipt (Ug shs 000')	Annual Target	Cum. Achieved Qty	Physical performance Score (%)	Remark
Beneficiary farmers (at least 30% female) provided with subsidized inputs through e-voucher system (number)	39,943,320	275,000	131500	148	11.61	The project only piloted in Kalungu District.
Stakeholder engagements and sensitization undertaken in the rollout districts (number of districts)	910,000	910,000	13	13	1.62	The kits were to be disseminated in Q3.
Soil testing kits procured and disseminated	80,000	75,000	200	200	0.14	
Farmers and farmer organizations registered in districts (number of districts)	540,000	340,000	18	22	0.96	More districts came on board after redistricting.
Grievance Redress Committees (GRC) operationalised in districts (number of districts)	180,000	180,000	18	5	0.09	A total of 244 GRCs were established in the five pilot districts.
Road chokes on farm access roads identified, surveyed and approved for rehabilitation works (activity)	540,000	399,000	1	1	0.96	

Potential site specific Environment and Social risks and impacts identified and corresponding Environmental and Social Management Plans (ESMPs) developed (number of districts)	648,000	180,834	18	5	1.15	Focused on the 5 pilot districts.
A Regulatory Impact Assessment (RIA) for Agricultural Mechanisation done (activity)	130,000	66,940	1	1	0.23	
Solar powered irrigation systems installed at ZARDIs (Number of sites)	2,100,000	0	7	3	0.00	The contractor was procured.
Small holder coffee irrigation systems designed and established (No of sites)	1,860,000	0	15	3	0.00	Field surveys and hydrological assessments were undertaken, procurement was ongoing.
Input quality assessment report prepared (No. of reports)	150,000	150,000	1	1	0.27	
Consultancy Services for Project Baseline Survey undertaken and Report produced (No. of activities)	1,666,002	457,800	2	1	2.70	The contractor was procured and inception documents were under review.
Furniture supplied (activity)	179,550	179,550	1	1	0.32	
Motor vehicles procured - 25 double cabins, station wagons, 2 salon cars, 27 motor cycles (number)	6,530,720	6,183,682	55	53	11.61	Procurement commenced for two salon cars.

Design and development of the Agriculture Geo Portal Platform undertaken (activity)	186,086	0	1	0	0.00	The contract was signed.
ICT equipment and Hybrid Power systems supplied and installed (No. of systems)	595,326	595,326	2	2	1.06	
Programme Performance	**56,239,004**	**9,993,132**			**32.71%**	

Source: Field findings

In the five pilot districts, 33,230 farmers were registered under this sub-programme, of whom 2,470 were enrolled and 148 benefitted from the subsidies by 31st December 2018. The agro-inputs supplied to the farmers included: 322kg of fertilisers for 148 farmers; 11 litres of insecticides for 11 farmers; 80 litres of herbicides for 37 farmers, and 358 tarpaulins and bags for 212 farmers.

Challenges

i) Slow and partial implementation of planned activities: a) delayed establishment of the e-payment gateway, hindering connectivity for seamless payment of agro-input dealers, b) delayed initiation of procurements by user departments and protracted procurement processes, iii) delayed access to funds by LGs from the District General Collection Accounts.
ii) Low turn up of farmers for training due to poor mobilization; this led to fewer farmers being registered and enrolled into the programme.
iii) Higher administrative costs due to redistricting that increased the number of implementing districts from 42 in the financing agreement to 47.

Recommendations

i) The NITA-U and MAAIF should fast track operationalization of the e-payment gateway.
ii) The MAAIF and LGs should enhance community awareness and mobilization to improve farmer registration and enrolment into the programme.
iii) The MFPED, MAAIF and World Bank should review and revise the project financing agreement to internalize the additional administrative costs.

Directorate of Animal Resources Programme

3.5.4 Farm Based Bee Reserve Establishment

Background

The Farm Based Bee Reserve Establishment sub-programme is a GoU funded intervention aimed at establishing bee reserves at farm level to reinforce community commitment for protecting and sustainably managing the bee resource in Uganda. The planned outputs over the five-year period (2015-2020) are: 480 bee reserves established and supported in 24 project districts; 2,400 mother colonies identified and supported; 24 honey collection and value addition centres established and supported; and 240 acres of bee forage established.

The approved budget for the sub-programme during FY 2018/19 is Ug shs 1.235 billion, of which Ug shs 779 million (63%) was released and Ug shs 714 million (92%) spent by 31st December 2018. This was very good release and expenditure performance. **However, the implementing departments were only able to access Ug shs 392.980 million (55%) of what was disbursed and utilized, the rest (Ug shs 321.02 million or 45%) having been allocated to other activities in MAAIF without their authorization**.

Performance

The semi-annual performance of the Farm Based Bee Reserve Establishment sub-programme during FY 2018/19 was poor rated at 10.34% (Table 3.9). Low performance was attributable to two key factors: diversion of funds from the project to other ministry activities, and introduction and resourcing of a second output 010205 Vector and Disease Control Measures in the sub-programme that was not budgeted for at project inception. The available resources were divided amongst two outputs instead of one output leading to lower performance.

Table 3.9: Performance of the Farm Based Bee Reserve Establishment Sub-programme by 31st December 2018

Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Planned Qty or Target	Cum. Achieved Qty	Physical performance Score (%)
Output 010203: Promotion of Animals and Animal Products: Honey collection and value addition centers established (Number of districts)	90,000,000	90,000,000	24.00	12.00	3.65

Output 010203: Promotion of Animals and Animal Products: Farm based bee reserve forage plantations established (number of districts)	23,000,000	23,000,000	24.00	15.00	1.17
Output 010203 Promotion of Animals and Animal Products: Beehives and other beekeeping equipment procured and distributed. (Number of bee hive sets)	30,000,000	29,000,000	96.00	5.00	0.13
Output 010203 Promotion of Animals and Animal Products: Motor vehicle expenses (Number of Vehicles)	6,000,000	12,000,000	6.00	6.00	0.24
Output 010203 Promotion of Animals and Animal Products: other promotional activities implemented (Number)	550,000,000	0	6.00	0	0.00
Output 010205 Vector Disease Control Measures: Community sensitization undertaken (number of shows)	11,000,000	31,000,000	1.00	1.00	0.32
Output 010205 Vector Disease Control Measures: Implementation of Tsetse and Trypanosomiasis control supported (litres of insecticides)	90,000,000	40,000,000	430.00	0	0.00
Output 010205 Vector Disease Control Measures: Office expenses on quarterly basis (quarters supported)	4,000,000	4,000,000	4	0	0.00
Output 010205 Vector Disease Control Measures: Tsetse suppression activities undertaken (Number of districts)	15,000,000	0	50.00	0	0.00
0utput 10209 Vector and Disease Control in Priority Animal Commodities supported: (Number of	285,000,000	0	8.00	-	0.00

activities)					
0utput 10209 Vector and Disease Control in Priority Animal Commodities: Controlling vector and animal disease supported (Number of activities)	90,000,000	96,000,000	6.00	4.00	4.57
0utput 10209 Vector and Disease Control in Priority Animal Commodities: Tsetse control activities undertaken in Karamoja sub region (Number of regions)	10,000,000	30,980,000	1.00	1.00	0.26
0utput 10209 Vector and Disease Control in Priority Animal Commodities: Motor vehicle expenses for Tsetse Control activities (Number of motor Vehicles)	28,000,000	14,000,000	0	0	0.00
Total	**1,232,000,000**	**369,980,000**			**10.34**

Source: Field findings

Five sets of bee hives and bee keeping equipment were procured and were still in MAAIF stores awaiting engraving by 31st December 2018. These included 100 beehives, 50 catcher boxes, 15 overalls, 15 pairs of groves and 20 smokers. Three sets of honey processing equipment were procured awaiting distribution to the districts. Monitoring of bee reserves was undertaken in the districts of Masaka, Lwengo, Kalungu, Bukomasimbi, Sembabule, Gomba, Kayunga, Buyende, Iganga, Kaliro, Mayuge, Buikwe, Mukono and Luuka.

Challenges

i) Partial achievement of outputs due to diversion of funds to other ministry activities; and inclusion of additional unplanned activities into the sub-programme. It is unlikely that the planned outputs of the sub-programme for the five-year period shall be achieved. Most outputs were not achieved yet the subprogramme was left with one year to completion date.

Recommendations

i) The MFPED should ensure compliance of MAAIF to the Public Finance Management Act and enforce punitive measures for non-compliance.
ii) The MAAIF should review and refocus the project on the most important outputs that contribute to the achievement of the project goals and targets.

3.5.5 Meat Export Support Services

Background

The Meat Export Support Services Sub-programme aims at establishing a credible national veterinary meat export support service with four core intervention areas: a) construct, equip and operate veterinary export holding grounds and quarantine stations, b) provide startup capital to facilitate purchase of beef animals for quarantining and sale to abattoirs, c) establish and operate a livestock identification and traceability system, and d) establish adequate meat export technical capacity in the meat export value chain.

The expected outputs over the five-year period 2015/16 to 2019/20 are: six quarantine stations and holding grounds established in selected farms; 4,000 beef animals purchased for each holding station; about 1,000 farmers organized in 33 cooperative organisations with a total of at least 100 ranches; and infrastructure development in six Government stock farms to build capacity to supply 250 ready to slaughter export grade cattle to the Egypt Uganda Food Security Company (EUFS) at Bombo, Luwero district. The MAAIF is the implementing agency that undertakes infrastructure development through tendering services to the National Enterprise Corporation (NEC).

The implementation plan aimed at fast tracking establishment of the sub-programme at the National Leadership Institute (NLI) ranch in Kyankwanzi District and NEC ranch in Gomba District during FY 2015/16 and FY 2016/17. Starting FY 2017/18, the sub-programme would be rolled out to Nshaara Ranch and Ruhengyere Stock Farm in Kiruhura District; Kasolwe Farm in Kamuli District; Maruzi Ranch in Apac District; Lusenke Ranch in Kayunga District.

The approved budget for the Meat Export Support Services sub-programme for FY 2018/19 is Ug shs 21.457 billion, of which Ug shs 6.830 billion (31.83%) was warranted and Ug shs 3.774 billion (55.25%) spent by 31st December 2018. This was poor release and expenditure performance.

Performance

The overall semi-annual performance of the Meat Export Support Services sub-programme during FY 2018/19 was fair (55.43%) – Table 3.10. The performance of the sub-programme was fair compared to the poor release due to some unspent balances from FY 2017/18 that NEC used in 2018/19.

Table 3.10: Performance of the Meat Export Support Services Sub-programme by 31st December 2018

Output	Annual Budget (Ug shs) 000'	Cum. Receipt Ug shs) 000'	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Output 80: Two holding grounds constructed, equipped and operated at Government ranches	11,010,400	5,200,000	2	1	52.29	This was spill over works from FY 2017/18.
Output 07: High quality animals procured for the slaughter houses	7,683,750	1,200,000	4000	0	0.00	Procurement differed until completion of infrastructure.
Output 05: Disease control and quarantine services for animals destined for slaughter houses undertaken (activity)	1,200,000	0	1	0	0.00	Awaiting procurement of animals.
Output 03: Supervision and technical backstopping undertaken at Bombo abattoir, NEC and NLI (quarterly activity)	662,028	246,000	4	2	3.14	Fuel and allowances were availed in time and vehicles maintained.
Special trucks procured for movement of animals (activity)	500,000	0	1	0	0.00	

Overall Performance	**21,056,178**	**6,646,000**			**55.43%**	

Source: Field findings

Whereas it was planned that in FY 2018/19 two holding grounds would be constructed, equipped and operated in Lusenke and Nshaara Ranch in Kayunga and Mbarara districts, respectively, the funds were re-allocated to finishing spill over infrastructure development activities of FY 2017/18 at Kyankwanzi.

By 6th January 2019, the completed works at NLI Kyankwanzi were: nine square miles of bush cleared; 51.8km of fencing and 27 gates installed; two loading and offloading ramps, two spray races and two crushes were installed; 45km of access roads opened; water reticulation system established (300,000 litre water tank, 9km electricity distribution line, six valley tanks, 40km of transmission and distribution water pipelines, water pump).

Still under construction were: the veterinary office block at 40% completion; one out of four junior quarters unit at 40% completion; one out of two senior staff quarters at 70% completion.


Roads and gates (left) and spray race (right) established at NLI in Kyankwanzi District

The overall pace of project implementation is slow and behind schedule as planned interventions were undertaken in two out of six farms over the four out of the five-year period. It is unlikely that the planned activities will be completed by project end; not even 50% of the activities will be completed.

One of the loading and offloading ramps (left) and junior staff quarters under construction (right) at NLI Kyankwanzi in Kyankwazi District

Challenges

i) Delayed completion of rehabilitation works at NLI by two years due to inadequate and late disbursements from MAAIF to NEC. The NEC was still implementing works at NLI that were scheduled to be completed in FY 2016/17, this increased the cost of the works.
ii) Overgrowth with weeds of the new roads and fields as NEC lacked a maintenance budget. The infrastructure was to be maintained by the ministry after handover from NEC.

Recommendation

i) The MAAIF should prioritise and fast track disbursement of funds for completion of infrastructure development at NLI, commencement of works at Nshaara ranches and procurement of animals for fattening on the farms.
ii) The MAAIF should commence maintenance of established infrastructure at the NEC and NLI ranches.

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Fisheries Resources Programme

3.5.6 Promoting Environmentally Sustainable Commercial Aquaculture

Background

The Promoting Environmentally Sustainable Commercial Aquaculture sub-programme is a four year (June 2018 to July 2022) intervention by GoU aimed at improving food and nutrition security, household incomes and livelihoods through promotion of an environmentally sustainable, inclusive and climate resilient socio-economic development, focusing on a market oriented aquaculture value chain targeting national and regional markets, small holders and smallholder associations.

The sub-programme four year budget is Ug shs 36.478 billion to be financed through a grant under the European Development Fund (EDF) from the European Union (EU) amounting to 35.343 billion (96.89%) and GoU counterpart funding totaling Ug shs 1.135 billion (3.11%)[11]. A key conditionality of the grant is that all funds must be 100% committed by January 2020; any funds not committed by that due date will not be spent.

The MAAIF targets achievement of three key outputs over the project period: a sound policy and regulatory environment that promotes gender equality, women empowerment and mitigation of climate change established and enforced; two aquaculture parks established – land based park in Apac district and a water based park in Kalangala district; and post-harvest losses reduced and market opportunities for aquaculture fish and fish products created.

The approved GoU budget was Ug shs 275 million, of which Ug shs 141.030 million (51%) was released and Ug shs 117.267 million (83%) spent by 31st December 2018. For donor funding, it was planned according to the program document that Ug shs 5.387 billion would be spent in year one 2018/19[12]. The approved donor budget was adjusted to Ug shs 4.928 billion that was released and fully spent by 31st December 2018. This was very good half year release and absorption of both donor and GoU funding.

Performance

The semi-annual performance of the sub-programme during FY 2018/19 was poor rated at 18.08% (Table 3.11). Although the project was signed off in January 2017, operations started in November 2018 after the Programme Implementation Unit (PMU) was put in place. The delayed start of the project was attributable to the stringent European Union prior conditions for effectiveness and low readiness of MAAIF to expedite them in a timely manner. These included recruitment of key staff, hiring of consultants/Technical Assistance (TA) and procurement of materials.

Table 3.11: Performance of the Promoting Environmentally Sustainable Commercial Aquaculture sub-programme by 31st December 2018

Output	Annual Budget (Ug Shs)	Cum. Receipt (Ug Shs)	Annual Planned Qty or Target	Cum. Achieved Qty	Physical performance Score (%)
Regulatory Impact Assessment and policy regulatory gap analysis (Consultation meetings)	111,226,893	111,226,893	1	3	2.339

[11] MAAIF and EU, 2017.
[12] MAAIF and EU, 2017.

Reviewed and updated Rules & Regulations /Aquaculture & Feed rules (Consultation meetings)	76,019,736	76,019,736	1	0	0
Development and Updating of the Aquaculture Guidelines (Validation meetings)	170,749,928	170,749,928	2	0	0
Print and conduct a dissemination launch for the Fisheries and Aquaculture Policy	12,672,960	12,672,960	1	0	0
Draft Aquaculture Development Plan and Strategy (2020-2025) reviewed and updated (Workshops)	62,652,317	62,652,317	3	0	0
Publication of popular versions prepares for aquaculture guidelines.	216,109,098	216,109,098	1	0	0
Standard Operating Procedures (SoPs) and Codes of Practices (CoPs) for aquaculture establishments reviewed and updated (Consultative meetings)	74,889,515	74,889,515	3	1	0.525
National Control and Residue Monitoring Plan for the aquaculture establishments developed (Consultative meetings)	69,868,676	69,868,676	4	0	0
Environmental Social Impact Assessment (Consultative meetings)	99,845,651	99,845,651	3	0	0
Institutional Capacity Building (Internship Placements)	2,218,600,763	2,218,600,763	69	0	0
Call for Proposal for the result area 2	158,103,500	158,103,500	3	3	3.325

(Advertisements)					
Land availability and demarcation for Kalangala Apac (meetings)	47,982,195	47,982,195	6	12	1.009
Feasibility /Market study/Bench marking (Visits)	137,255,026	137,255,026	2	2	2.887
Procurement of Motor vehicles and motor cycles	813,462,513	813,462,513	7	0	0.000
Office Operating expenses and fuel lubricants	208,885,000	208,885,000	4	2	2.197
Total	**4,478,323,770**	**4,478,323,770**	**0**	**0**	**18.088%**

Source: Field findings

The activities that were implemented by 31st December 2018 included: studies and surveys to establish availability of land and suitability of sites; sensitization of stakeholders in Kalangala and Apac districts; initiation of contracting processes for various service providers and hiring of consultants for the regulatory impact assessment. Most planned activities were differed into the subsequent quarters

Implementation challenges

i) Slow project execution and resource absorption due to delayed approvals and clearance of procurements (above Euro 30,000) by the EU and staffing by the Ministry of Public Service (MoPS);
ii) Poor planning and budgeting – the cost of land acquisition for the aquaculture parks (500 acres for Apac District and 20 acres for Kalangala District) and land compensations was not budgeted for in the original project agreement. The project milestones may not be delivered on time as this cost was not prioritized in the MAAIF budget for FY 2018/19.

Recommendations

i) The EU should increase the thresh hold requiring approvals to Euro 100,000 such that smaller procurements below that thresh hold are approved through the GoU processes.
ii) The MAAIF and MFPED should prioritize funding for land acquisition of this project.

Overall MAAIF Vote Performance

The overall semi-annual performance of the MAAIF during FY 2018/19 based on the sampled programmes and sub-programmes, was poor rated at 36.27% (Table 3.12). Poor performance was due to delayed initiation of procurements related to late submission of accountabilities;

diversion of funds from planned activities to other ministry interventions; slow disbursements to implementing departments and delayed completion of the e-voucher system.

Table 3.12: Overall MAAIF Performance by 31st December 2018

Vote	Performance (%)
Agricultural Infrastructural Mechanisation and Water for Production Programme	61.41
Crop Resources Programme	32.71
Directorate of Animal Resources	32.88
Fisheries Resources Programme	18.08
Average sector performance	**36.27**

Source: Field findings

3.6 National Agricultural Advisory Services/Operation Wealth Creation

3.6.1 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 18 districts (Annex 1).

Agricultural Advisory Services Programme

3.6.2 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 2018/19 is Ug shs 244.851 billion, of which Ug shs 158.061 billion (65%) was released and Ug shs 103.261 billion

(65.3%) spent by 31st December 2018. This was very good half year release and fair absorption of the funds. The frontloaded funds were not fully absorbed.

Performance

The following strategic commodities were distributed to farmers and farmers' groups by the NAADS Secretariat by 31st December 2019: maize (3.124 mt); bean seed (0.315mt); banana suckers (368,820); seed potato (6,856 bags); heifers (837); improved pigs (100); day old layer chicks (8,400); Kuroilers (12,000), tractors (110) and poultry feeds (72,240kgs).

Most of the monitored districts received the inputs, solar powered irrigation equipment and value addition machinery, although in lesser quantities than allocated. Some districts like Zombo did not receive cassava cuttings, irish potato seeds, dairy cattle and pigs and value addition machinery that was allocated in the NAADS Secretariat advisory note; some chicks delivered in Kaliro district died due to stress during transportation over long distances. Some districts including Jinja, Kamuli and Karamoja sub-region differed receipt of inputs and planting to subsequent periods when rains were expected.

NAADS/OWC solar powered irrigation system installed at Mr. Buwembo's farm in Buwaga village Buikwe District, (left) and maize mill received by Namugongo Farmers' Cooperative Society in Industrial Area, Kaliro District (right)

The maize milling machine that was provided to Namugongo Farmers' Cooperative Society in Industrial Area Lumbuye parish, Kaliro Town Council in Kaliro District was of poor quality. After three months of operation, the machine broke down and the milling speed reduced. The cost of repairing the machine was on an increasing trend. The Cooperative had fabricated and replaced some of the parts of the machine to increase its efficiency.

In Bushenyi District, the Youth Forum Demonstration Farm in Igorora village, Mazinga Ward Nyakabirizi Division received 40 goats under a Presidential Pledge that were to be kept on the farm for demonstration purposes. However, the Youth Leader reported that the goats were given out and denied access for the monitoring team to visit the demonstration farm. The farm had also received an additional 60 goats by 16th January 2019 which were reported as distributed to the youth. The distribution lists were not available for review. This farm should be visited by the Office of the Auditor General to assess progress in implementation of the programme and accountability for the commodities that were received.

The detailed findings of this sub-programme in the monitored districts are presented in Table 3.13.

Challenges

i) Loss of materials and low production due to; drought, late delivery of inputs, poor quality of seedlings sourced and transported over long distances, inadequate mobilization and supervision of farmers by extension workers and unreliable meteorology information to guide farmers on planting periods.
ii) Low livestock productivity (2litres to 5 litres of milk per day on average) due to the poor quality of animal breeds distributed by NAADS/OWC.
iii) Inequitable access to inputs by farmers: the inputs were no longer sufficient to make a significant impact on production and household incomes and food security. Most districts received 2-3 commodities that were distributed to less than 10% of the farming communities. Some of the inputs were wasted due to late deliveries and inadequate mobilisation and preparation of benefiting farmers.
iv) Limited coverage of some districts due to: a) shortage of planting material among suppliers for some crops notably banana (tissue cultured material) and Irish potato seed, b) prolonged quarantine in Kiruhura, Gomba, Kyankwanzi, Kakumiro, Sembabule districts due to outbreak of Foot and Mouth disease, c) Incidences of delays by some suppliers, occasionally leading to rejection of planting materials in some DLGs, d) protracted procurement processes.

Recommendations

i) The MAAIF and OWC Secretariat should review and restructure the Agricultural Advisory Services Programme to move away from distributing free inputs to focusing funds on mechanization, water for production and provision of value addition and agro-processing machinery and equipment.
ii) The MAAIF and LGs should strengthen the delivery of artificial insemination services to farmers to raise animal productivity.

3.6.3 Head quarters

The Headquarters sub-programme focuses on the administration and management of the Government Purchases sub-programme. The approved budget for the Headquarters sub-programme for FY 2018/19 is Ug shs 5.137 billion, of which Ug shs 2.755 billion (53.63%) was released and Ug shs 2.198 billion (79.78%) was spent by 31st December 2018. This was very good half year release and good absorption of the funds.

Performance

By 31st March 2018, the NAADS Secretariat coordinated and managed the procurement and distribution of inputs, solar powered irrigation systems, tractors, value addition equipment and supported value chain development. The detailed findings of this sub-programme in the monitored districts are presented in Table 3.13.

Overall performance of the Agricultural Advisory Services Programme

The overall performance of the Agricultural Advisory Services Programme in FY 2018/19 was fair rated at 68.35% (Table 3.13). Underperformance was due to distribution of less inputs than targeted and wastage of some inputs due to low readiness of farmers to receive them.

Table 3.13: Performance of the Agricultural Advisory Services Programme by 31st December 2018

Output	Annual Budget (Ug Shs)	Cumulative Receipt (Ug Shs)	Annual Planned Qty or Target	Cum. Achieved Quantity	Physical Performance Score (%)
Output: 15 Managing distribution of agricultural inputs (No. of exercises)	18,505,431,570	11,962,145,299	14	7	16.05
Output: 18 Support to upper end Agricultural Value Chains and Agribusiness Development(No. of farmer groups supported)	13,860,000,000	13,060,000,000	120	40	5.50
Output: 22 Planning, Monitoring and Evaluation (No. of activities)	1,807,393,253	1,506,614,316	7	3	1.04
Output: 75 Purchase of Motor Vehicles and Other Transport Equipment	1,050,000,000	962,735,649	6	0	0.00
Output: 76 Purchase of Office and ICT Equipment, including Software	124,200,000	99,200,000	6	0	0.00

Output: 78 Purchase of Office and Residential Furniture and Fittings(activities)	110,000,000	88,563,944	2	1	0.08
Output: 14 Provision of priority and strategic Agricultural Inputs - TRACTORS (Number)	43,680,000,000	19,832,277,730	336	110	35.31
Output: 14 Provision of priority agricultural inputs -MAIZE (kg)	1,516,490,000	1,380,966,000	343,300	312,600	1.70
Output: 14 Provision of priority agricultural inputs -BEANS (kg)	765,388,500	773,888,500	201,300	201,300	0.85
Output: 14 Provision of priority agricultural inputs -BANANA TISSUES (platelets)	517,500,000	90,000,000	71,050	37,000	0.58
Output: 14 Provision of priority agricultural inputs -CASSAVA CUTTINGS (bags)	735,250,000	0	14,705	0	0.00
Output: 14 Provision of priority agricultural inputs -IRISH POTATOES (bags)	264,050,000	170,100,000	1,570	810	0.24
Output: 14 Provision of priority agricultural inputs -ONIONS (kg)	8,000,000	7,000,000	900	700	0.01
Output: 14 Provision of priority agricultural inputs -COFFEE (Seedlings)	787,500,000	2,789,294,550	2,250,000	7,969,413	0.88
Output: 14 Provision of priority agricultural inputs -CHICKS (No.)	12,600,000	25,200,000	8,400	8,400	0.01
Output: 14 Provision of priority agricultural inputs -CHICKEN MASH (kg)	17,409,600	33,134,400	11,160	21,240	0.02

Output: 14 Provision of priority agricultural inputs -GROWERS MASH (kg)	26,208,000	26,208,000	16,800	25,200	0.03
Output: 14 Provision of priority agricultural inputs -FISH FINGERLINGS (No.)	67,884,000	103,123,600	226,280	371,012	0.08
Output: 14 Provision of priority agricultural inputs -FISH FEEDS (kg)	42,440,000	286,868,936	10,000	67,594	0.05
Output: 14 Provision of priority agricultural inputs -DAIRY CATTLES (No.)	984,250,000	783,000,000	467	374	1.10
Total	**89,205,909,010**				**68.35%**

Source: Field findings

Gender

Access to inputs was higher for men than women due to the stringent criteria for farmer selection. To benefit from heifers, the farmers were required to have a constructed animal shed, at least half an acre of pasture, a spray pump and funds for buying feeds and acaricide. Most women lacked land and income to meet these requirements.

Overall Vote Performance

The overall performance of the NAADS/OWC was fair at 68.35%. Farmers received strategic inputs and commodities but in lesser volumes than planned which limited impact in terms of food security and household incomes. The late procurement and delivery of inputs, inadequate access to extension services, the lack good of quality seeds in the country and low capacity of suppliers were persistent challenges to programme performance.

3.7 National Agricultural Research Organisation

3.7.1 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"*[13]. 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

[13] MAAIF, 2016.

National Livestock Resources Research Institute; 11 National Semi arid Resources Research Institute (NaSARRI); and Project 1139 Agriculture Technology and Agribusiness Advisory Services (ATAAS).

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 institutions that were monitored are indicated in Annex 5.1.

The approved budget for NARO for FY 2018/19 inclusive of NTR is Ug shs 69.499 billion, of which Ug shs 56.662 billion (81.52%) was released and Ug shs 47.311 billion (83.49%) spent by 31st December 2018. This was very good release and expenditure performance.

Agricultural Research Programme

Performance

The overall performance of the Agricultural Research Programme is presented in Table 3.14. Analysis for the programme was constrained by poor expenditure and performance tracking within the NARO Institutes and ZARDIs. Here under is the narrative performance of the sampled sub-programmes by 31st December 2018.

3.7.2 Abi ZARDI

Located in Obopi village, Ewadri parish, Madibe sub-county, Arua District, the Abi ZARDI undertook research and technology generation on soil conservation methods, fruits, apiary, silage, cassava, beans, sorghum, maize, sweet potatoes, citrus, coffee, dairy, goats and poultry, among other commodities. The main challenges were the loss of experimental crops due to drought and pests and diseases; high staff turnover due to low salary scales and power electrical and internet connectivity.

Non-functional borehole installed at Abi ZARDI lacking pump and piping to the gardens

In FY 2017/18, NARO established a borehole at the ZARDI for provision of water for production. However, the borehole was not function as works were incomplete – the facility lacked a pump and water distribution pipes.

3.7.3 Head Quarters/Support for NARO

The Headquarters sub-programme, also referred to as NARO Secretariat (NAROSEC), is located in Entebbe Municipality, Wakiso District. The NAROSEC procured assorted equipment, furniture and vehicles and constructed/rehabilitated various infrastructures at the Institutes and ZARDIs including: Nursery Shed and water borne facilities at Kiige; staff houses at NACORI and Bulindi ZARDI; Guest House at NaFORRI; and perimeter fencing at various stations. Land surveying was also undertaken at Maruzi Ranch and conference facilities were provided for various events. Works had just commenced for several infrastructures and procurements had just commenced for assorted equipment.

3.7.4 Kachwekano ZARDI

Kachwekano ZARDI is located in Kachwekano village in Rubanda District. Limited research (about 40% operational level) on potato, apple and sorghum varieties and fertilizer usage was undertaken at the ZARDI using off budget resources. The development funds were mainly used for workshops and acquisition of machinery and equipment as NARO lacked expenditure codes on agricultural research.

3.7.5 Mbarara ZARDI

Mbarara ZARDI is located in Mbarara Municipality, Mbarara district. Very limited research work was undertaken by 31st December 2018 at Mbarara ZARDI due to inadequate funding and the low absorption of funds from the agricultural supplies and medical expenditure code that was not relevant for the planned activities. About 60% of the available development funds were earmarked for equipment and furniture which were not needed by the ZARDI as it had received sufficient items using the ATAAS grant. The ZARDI was at 10% operational level with regard to research work. Concise data on performance was not readily available.

3.7.6 Mukono ZARDI

Mukono ZARDI is located in DFI village, Ntawo parish, Mukono Municipality in Mukono district. Research and technology generation was undertaken on agro-forestry, apples, legumes, root crops and fertilisers. Concise data was not availed by the ZARDI to enable meaningful analysis of the station performance.

3.7.7 National Coffee Research Institute

The National Coffee Research Institute (NaCORI) is located in Kituza village, Ssaayi parish, Ntenjeru sub-county Mukono District. Research was undertaken, with support from the UCDA, to develop high yielding and disease resistant Robusta coffee and cocoa varieties and associated agronomic practices that could

Functional biotechnology laboratory at NaCORI in Mukono District

enhance performance. The biotechnology laboratory was 40% functional.

A total of 5,647 Robusta tissue culture plants were being maintained and data collection was ongoing on the Coffee Wilt Disease Resistant (CWDR) varieties. The main challenge was the inadequate allocations for developing new varieties of coffee that would address the emerging challenges of new pests and diseases and harsh climatic conditions.

3.7.8 National Fisheries Resources Research Institute

The National Fisheries Resources Research Institute (NaFIRRI) is located in Jinja Municipality, Jinja District. Research was undertaken on fish habitat management, capture fisheries and biodiversity conservation, aquaculture and fish bioscience, innovations and post-harvest handling in the fisheries sector. The ecological impact of dam construction on the Upper Victoria Nile was determined. The research work at NaFIRRi was boosted by the availability of off budget projects. The key challenges included staffing gaps in critical positions; lack of insurance for the research water vessels and inadequate allocations to fisheries surveys.

3.7.9 Ngetta ZARDI

Ngetta ZARDI is located in Okiiyere village, Telela parish, Ngetta sub-county in Lira District. Research was undertaken on feeding strategies for livestock and poultry and technological options were generated. On farm and off farm demonstrations were established for high yielding disease resistant crop varieties. Experiments were conducted on conservation and sustainable use of threatened savannah woodlands. Integrated pest and disease management strategies for increased sesame and citrus varieties were developed. The main challenges were inadequate allocations for research work, loss of experiments due to drought and poor performance data capture.

Overall performance of the Agricultural Research Programme

The overall semi-annual performance of the Agricultural Research programme during FY 2018/19 was poor rated at 41.78% (Table 3.14). Poor performance was due to the slow down/stalment of research and technology generation activities at all institutes/ZARDIs arising from the end of the donor financed project in FY 2017/18 and limited funds disbursed for planned interventions. Key staff at most entities were absent during the monitoring visits citing demotivation due to lack of funds for planned research work.

Table 3.14: Performance of the Agricultural Research Programme by 31st December 2018

Output	Annual Budget (Ug Shs)	Cum.Receipt (Ug Shs)	Annual Planned Quantity or Target	Cum. Achieved Qty	Physical performance Score (%)
Various infrastructures constructed (number)	6,183,301,772	3,091,650,886	15	3.50	16.67

Output 221005: Conference facilities provided for research work (number of services)	52,369,107	52,369,107	33	28.00	0.26
Assorted laboratory, specialised, IT and vaccine equipment procured (lots)	7,120,141,600	3,560,070,800	26	2.30	7.28
Bush cleared and fencing undertaken (activities)	787,827,060	393,913,530	3	1.30	3.94
Technologies generated and disseminated through uptake pathways (activity)	752,648,000	473,743,879	6	3.50	4.03
Data collected and catalogued (activities)	10,000,000	3,000,000	1	0.30	0.06
Breeding work undertaken on animal resources - catfish, forages, cows, goats, fish (activities)	73,400,000	34,988,000	10	4.00	0.36
Research work undertaken on crops and natural resources (activities)	144,626,000	42,030,000	11	4.40	0.84
Sorghum germplasm work undertaken (activities)	16,930,000	1,540,000	1	0.20	0.10
Functional Biotechnology Laboratory established (number)	1,595,140,000	1,042,000,000	1	0.40	5.64
Coffee research and technology development undertaken (number of activities)	389,185,000	64,740,000	5	3.00	2.25
The Ecological Impact of dam construction on the status of fisheries determined (Reports)	102,000,000	64,998,090	3	1.00	0.00

Fish Cage research sites monitored and maintained (quarterly)	60,478,000	44,715,000	4	2.00	0.24
Total	**17,311,715,771**				**41.78%**

Source: Field findings

Challenges

i) Limited research work and generation of technology was undertaken by NARO institutions due to: a) inadequate funding, following the closure of the donor project in 2017/18. Most ATAAS projects that were initiated in the previous years had come to a standstill. B) Lack of research codes to aid expenditure; all the NARO funds were lumped under the agricultural supplies and medical code which was not relevant for the research activities.

ii) Inability to assess NARO performance comprehensively due to poor quality of data con funds disbursements and utilization and performance in most institutions.

Recommendations

i) The NARO should recruit/strengthen the Monitoring and Evaluation function in all its entities and enhance the ccapacity of the scientists and planning units to capture data efficiently.

ii) The MFPED should review the expenditure codes under NARO to provide codes that are relevant for the research work.

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 2018/19 is Ug shs 10.997 billion, of which Ug shs 7.179 billion (65.28%) was released and Ug shs 4.953 billion (69.10%) spent by 31st December 2018. This was very good release performance for half year and poor resource absorption. The NAGRC&DB has one programme - Breeding and Genetic Development programme and 11 sub-programmes. The programme and selected sub-programmes were monitored as indicated in Annex 1.

Breeding and Genetic Development

Performance

The overall performance of the Breeding and Genetic Development Programme is presented in Table 3.15. Presented below is performance of the sampled sub-programmes.

3.8.2 Aswa Ranch

Hay bales produced and ready for use at Aswa Ranch in Pader District

Located in Bulobu village, Bulobu parish, Angangwara sub-county in Pader District, Aswa Ranch is mandated to breed and conserve Ankole, Boran and Zebu cattle. The animal herd increased tremendously during FY 2018/19 semi-annual from 1,752 animals on 1st July 2018 to 1,990 animals by 31st December 2018, a net increase of 138 animals. Ongoing works on a water reticulation system was at 30% completion.

The station had received a tractor with implements which led to an increase in availability of pasture and hay for the animals. The lack of breeding paddocks, late delivery of hormones and poor quality of animal breeds slowed the breeding programme. Major challenges were loss of pastures due to bush fires and cattle theft by encroachers as the land boundaries were not demarcated and the land was not titled. The station employed 25 staff of whom 24 were males and one was a female.

3.8.3 Kasolwe Stock Farm

Located in Kasolwe Bulagala B village, Kasolwe parish, Kagumba sub-county Kamuli District, Kasolwe Stock Farm is involved in conserving the small East African Zebu, cross breeding with dairy and beef animals, goat conservation and popularizing the Kuroiler birds. The farm received 1,500 kuroilers, 2,000 fencing poles from NAGRC&DB headquarters and construction of a pig sty was 40% complete by 3rd January 2019.

NAGRC financed pig sty under construction at Kasolwe Stock Farm in Kasolwe village, Kamuli District

A total of 24 acres of pastures were established and an additional 10 acres were ploughed awaiting the rain reason for planting. The cattle stock increased from 901 animals to 962 animals (net 61 animals), while the goat herd increased modestly from 654 to 664 animals between 1st July 2018 and 31st December 2018. The poultry reduced from 1,500 to 1,426 birds in the same period due to high prevalence of diseases and inadequate drugs and feeds. A total of 41 staff were employed on the farm of whom two (4.87%) were females tending calves and 39 (95.13%) were males.

3.8.4 Lusenke Stock Farm

Located in Lusenke village, Namsaala parish, Busaana sub-county, Kayunga District, Lusenke Stock Farm is undertaking conservation and upgrading of East African Short Horn Zebu and production of high quality animal feeds. By 31st December 2018, the farm had received Ug shs 25,305,000 from NAGRC&DB Headquarters that was fully spent on ploughing fields, establishment of fodder and pastures including 80 acres of Chloris Gayana, 5 acres of Napier grass, 40 acres of maize and 40 acres of soya bean; and maintaining the animal herds. The farm recorded a positive growth (69 animals) from the opening stock at 475 animals on July 1st 2018 to 544 animals on 31st December 2018.

Construction of the administration block and Farm Manager's House was at 90% completion level pending painting of the surfaces and leveling the compound. The farm received a tractor with implements. There was gender inequality in access to employment on the farm which employed 12 workers of whom 11 were male and one was a female. The long distances moved in search for pastures and water for the animals was noted to be a major disincentive for female employment on the farm. Key challenges included delayed/late release of funds, pasture seeds and artificial insemination (AI) materials, understaffing, inadequate staff housing, lack of storage facilities for produce and equipment and land encroachment leading to loss of farm produce.


Breeding herds (left) and newly constructed administration block at Lusenke Stock Farm in Kayunga District

3.8.5 Maruzi Ranch

Located in Kayei parish in Akokoro sub-county, and Agaga parish in Ibuje sub-county, Apac District, Maruzi Ranch is mandated to undertake beef cattle cross breeding. The ranch has previously occupied 64 square miles which was in July 2018 apportioned to four entities through a Presidential Directive as follows: NAGRC&DB (8 square miles); NARO (7 square miles); Hillside - an investor (43 square miles); and outgrowers (6 square miles).

The semi-annual performance of the Maruzi Ranch during FY 2018/19 was very low. Most planned activities were not implemented due to lack of breeding infrastructure, encroachers and disruption of interventions by the ongoing processes of land demarcation for the four entities. The cattle stock increased modestly (net 38 animals) from 613 animals on 1st July 2018 to 651 animals by 31st December 2018. The cattle mortality was high due to theft by encroachers, diseases from herds in the communities and inadequate pastures. Ongoing works included a cattle crush that was 75% complete, two water troughs at 50% completion and fencing.

Foundation of water trough constructed at Maruzi Ranch in Apac District

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. The farm realized a modest increase (net 14 animals) in cattle herds from 169 animals on 1st July 2018 to 183 animals by 31st December 2018. The slow growth in cattle herds was due to the low numbers of dairy animals on the farm. The main challenge on the farm was land encroachment as 219 acres out of 719 acres were occupied by encroachers. This reduced the available pastures for animals leading to low production and productivity.

3.8.7 Nshaara Ranch

Located in Karengo village, Nyakashita parish, Nyakashashara sub-county in Kiruhura District, Nshaara Ranch is involved in conservation and improvement of Ankole long horned cattle and adaptable meat goats. By 14th January 2019, the ranch had 2,070 cattle and 342 goats. A total of 600 acres of land was cleared but pasture had not been planted despite the fact that 1,000kg of pasture seeds were provided by NAGRC&DB headquarters. Construction works for 20km of road commenced and four kraals were constructed. A water reticulation system was established at the station. The main challenge was inadequate support from NAGRC&DB Headquarters in terms of funds to address emergencies, fuel for farm operations and farm infrastructure.

3.8.8 Sanga Field Station

Sanga Field Station is located in Sanga village, Sanga parish, Sanga Town Council in Kiruhura District. The station recorded a high net growth (179) in goat stock from 435 animals on 1st July 2018 to 614 animals by 31st December 2018; and a modest increase (51) in cattle stock from 335 animals to 386 animals during the same period. A total of 12 calves were lost due to high prevalence of diseases and lack of vaccines. Other challenges included: encroachment of 1.5 square miles taken over by Captain Basaija out of the 2.5 square miles; lack of paddocks for the breeding programme; high goat mortality due to late delivery of drugs; lack of imprest for emergencies and low production and productivity of animals due to the poor quality of the animal breeds and inadequate breeding structures.

3.8.9 Ruhengyere Field Station

The station is located in Kayonza village, Kayonza parish, Kikatsi sub-county in Kiruhura District. The cattle herds increased from 3,084 animals on 1st July 2018 to 3,169 animals, a net increase of 85; the goats herd increased by a net of 193 animals from 1,377 animals to 1,570 animals over the same period. There was very high mortality (101) of calves due to suspected Rift Valley Fever as the station had no vaccines at the time of the epidemic.

Artificial insemination staff hostel under construction at Ruhengyere Field Station in Kiruhura District

A total of 19 cattle died due to old age and the delay in disposal of unproductive animals by over a year. Construction of an artificial insemination staff hostel was 45% complete; the spray race works were 100% complete while works were at foundation level for a hay barn.

Overall performance of the Breeding and Genetic Development Programme

The overall performance of the Breeding and Genetic Development programme by 31st December 2018 was fair rated at 56.63% (Table 3.15). Lower performance was due to delayed procurements and delivery of assorted inputs and breeding materials for the farms; slow multiplication of animal breeds due to lack of breeding infrastructure, good quality breeds, land encroachment and poor pastures; and low capacity of contractors to undertake simultaneous works at the different stations.

Table 3.15: Performance of the National Animal Genetic Resources Centre and Data Bank by 31st December 2018

Output	Annual Ouput Budget (Ug shs)	Cumulative receipts per output	Annual Planned Quantity or Target	Cum. Achieved Quantity	Physical performance Score (%)	Challenges
Output 015627: Pasture seeds and vegetative materials multiplied (tonnes)	528,867,079	325,625,307	134	184.37	12.28	Crop was not ready for harvest; drought; land cleared but not planted.
Output 015627: Pasture and fodder banks established (acres)	244,796,874	156,270,312	1170	383	2.91	Late delivery of seeds.
Output 015609: Pure diary animals and appropriate crosses multiplied (number)	237,683,208	153,508,639	702	203	2.47	Delayed procurements, lack of good quality dairy animals; aged herds.
Output 015614:Pure beef breeds and appropriate crosses multiplied (number)	249,871,018	159,349,364	1711	912	4.85	Late delivery of AI materials.
Output 015621: Breeding and multiplication of meat goats undertaken (number)	30,408,477	19,765,510	865	356.5	0.45	High mortality due to diseases, vermin, abortions; late delivery of hormones for breeding.
Project 1325: Farm structure established (number)	573,220,140	386,343,091	9	2.2	4.83	Low capacity of contractors to complete works in time.
Project 1325: Motorcycles provided (number)	150,000,000	165,000,000	10	11	3.48	

Project 1325: Borehole constructed (number)	100,000,000	73,750,000	4	0	0	Low capacity of contractors.
Project 1325: Fencing materials received (No. of poles with barbed wire)	405,912,750	263,843,288	19000	10995	8.39	
Project 1325: Solar installed (units)	20,000,000	13,000,000	1	0	0	
Project 1325: Cultivable assets acquired - cattle (number)	500,000,000	325,000,000	500	0	0	Procurements were ongoing.
Project 1325: Water reticulation system established (number of systems)	597,025,470	388,066,556	2	0.7	7.46	
Project 1325: Roads and bridges opened and graded (activity)	260,000,000	52,000,000	1	0.2	0.00	
Project 1325: Feeds procured and supplied to farms (activity)	289,744,679	289,744,679	1	1	6.73	
Output 015636: Parent stock for poultry procured with feeds (activity)	119,999,958	119,999,958	1	1	2.79	
Total	**4,307,529,653**	**4,307,529,653**			**56.63%**	

Source: Field findings

Overall NAGRC&DB Performance

Breeding and Genetic development continued on the NAGRC&DB stations involving conservation and multiplication of beef and dairy cattle, goats, pigs and poultry. However, the planned growth rate of the animal herds on most stations was below target due to: the aging of the breeding herds, lack of paddocking and other animal husbandry infrastructure to manage the breeding programme effectively, lack of water for production, delayed delivery of artificial insemination materials and hormones, land wrangles and encroachment and harsh climatic conditions.

Challenges

i) Low production and productivity and multiplication of animal herds due to: old age of herds; inadequate breeding infrastructure, late delivery of breeding materials, poor pastures due to inadequate bush clearing, lack of water for production.
ii) High mortality of animals and poultry due to lack of imprest to address emergencies like disease epidemics; late delivery of drugs; and lack of vaccines and water for production.
iii) Loss of animals due to land wrangles and encroachment on Government land

Recommendations

i) The NAGRC&DB should evaluate the breeding programme to assess performance against set targets in the five-year strategic plan and address key gaps
ii) The NAGRC&DB and MAAIF should prioritize financing for improving cattle breeds and breeding infrastructure.
iii) The MAAIF, NAGRC&DB, NARO, Ministry of Lands, Housing and Urban Development and Uganda Land Commission should ensure that all NAGRC&DB public lands are demarcated and titled and the land wrangles resolved.
iv) The NAGRC&DB should decentralize some of the operational funds to the farms to enable them address emergencies expeditiously.

3.9 Uganda Coffee Development Authority

3.9.1 Introduction

The Government established the Uganda Coffee Development Authority (UCDA) in 1991 to promote and oversee the development of coffee industry through support to research, propagation of clean planting materials, extension, quality assurance, value addition and timely provision of market information to stakeholders. In line with the Coffee Strategy 2020, the GoU's focus is on increasing production and productivity through coffee replanting in Coffee Wilt Disease (CWD) affected areas, replacement of the aged unproductive trees and supporting introduction of commercial coffee production in new areas especially Northern Uganda. The Government plans to accelerate national coffee production from 4.2 million bags of 60kgs each to 20 million bags by 2025.

The approved budget for UCDA for FY 2018/19 is Ug shs 76.418 billion, of which Ug shs 64.882 billion (85%) was released and Ug shs 57.898 billion (89%) spent by 31st December 2018. This was good release and expenditure performance. The UCDA has one programme Coffee Development and three sub-programmes: 01 Development Services; 02 Quality and Regulatory Services; 03 Corporate Services 04 Strategy and Business Development. All the sub-programmes were monitored. The districts that were visited are presented in Annex 1.

Coffee Development Programme

3.9.2 Development Services

The UCDA distributed 35,000kgs of clean coffee planting seeds, 153,272,387 seedlings, and assorted chemicals and equipment to farmers countrywide by 31st December 2018. A total of 760,660 coffee wilt disease resistant (CWDr) plantlets were distributed to nursery operators and seedlings were procured from private nursery operators for the farmers. All the monitored regions had received the inputs and farmers expressed satisfaction with the quality of seedlings from the private nurseries. However, the delayed procurement and delivery of inputs slowed programme implementation.

In Zombo District, establishment of demonstration farms was differed to subsequent seasons due to late delivery of operational funds and inputs. This led to low adoption of good agronomic practices by farmers. In Arua District, the climatic conditions were harsh and private nurseries planted the seedlings late. The seedlings were not ready by the start of the planting season.

In Amuru district, the nursery operatorss complained about the poor viability of coffee seeds and non-payment of arrears by UCDA for the seedlings supplied in previous periods. For example, Mr. Kilama of Pukur village, Lamogi sub-county, Amuru District had not been paid arrears of FY 2014/15 amounting to Ug shs 6.6 million; payment for 45,000 seedlings (worth Ug shs 15,750 million delivered to farmers in FY 2017/18 was pending.

Mr. Kilama's coffee seedlings planted from 250kgs of elite seed received from UCDA in FY 2018/19

3.9.3 Quality and Regulatory Services

The UCDA trained farmers in coffee growing areas in quality awareness, and best practices in harvest and post-harvest handling. The quality of coffee was assessed along the value chain through collection of samples from the various stakeholders. Cup testing and coffee certification was undertaken at the UCDA laboratory. The main challenges were the inadequate staff to assure quality in all coffee growing regions and inadequate capacity at the laboratories to assess quality for the increased coffee samples.

Coffee cup tasting (left) and coffee samples graded and certified at UCDA Lugogo Laboratories in Kampala District

Overall performance of the Coffee Development Programme

The overall semi-annual performance of the Coffee Development Programme during FY 2018/19 was good rated at 79.91% (Table 3.16).

Table 3.16: Performance of the Coffee Development Programme by 31st December 2018

Output	Annual Budget (Ug shs) 000'	Cumulative receipt (Ug shs) 000'	Annual Planned Quantity or Target	Cum. Achieved Qty	Physical Performance Score (%)
Output: 01 Clean Coffee Planting Material Produced /Robusta seed procured (Kg)	50,000	50,000	50,000	10,000	0.17
Output: 01 Coffee knowledge disseminated (Number of radio talk shows)	81,000	0	12	18	0.00

Output: 01 Clean Coffee Planting Material Produced /Arabica seed procured (Kg)	20,000	20,000	1,666	0	0.00
Output: 01 Clean Coffee Planting Material Produced (Number of seed gardens supported)	7,000	7,000	3	1	0.01
Output: 01 Clean Coffee Planting Material Produced (Number of CWD-R nurseries supported)	400,000	400,000	60	36	0.80
Output: 01 Procure CWDr Plantlets for distribution to farmers.(Number)	375,000	375,000	250,000	124,050	0.62
Output: 01 Coordination of Program /Activities Office Rental and Utilities payments.(Number of offices facilitated)	28,500	25,000	3	3	0.09
Output: 01 Procure and distribute assorted chemicals and equipment (Number of items)	200,000	200,000	1	0	0.27
Output: 01 Procure and distribute Coffee Seedlings to farmers (Number)	22,311,396	22,311,396	61,312,731.	94,306,324	74.07
Output: 01 Procurement and distribution of Record books (Number)	115,975	120,375	4,983	3,016	0.22
Establish Farm Demonstration Gardens (Number)	1,000	2,000	10	21	0.00
Output: 01 Coffee Extension Liaison and Coordination (Number of Trainings)	21,120	8,000	106	0	0.00
Output: 01 Coffee Rehabilitation through equipping farmer groups. (Number of assorted rehabilitation tool kits procured)	1,110,000	0	1,100	0	0.00
Output: 01 Monitoring and Supervision of Pruning and stumping of old coffee trees .(Number of acres supervised)	675,000	251,000	37,500	35	0.01

Output: 01 Procurement and distribution of bags of Fertilizers to farmers (Number)	3,250,000	3,250,000	25,000	0	0.00
Output: 06 Promote coffee production in Northern Uganda (Number of CWDR mother Gardens)	360,000	360,000	36	0	0.00
Output: 06 Promote coffee production in Northern Uganda (Number of banana suckers)	100,000	62,500	20,000	25,000	0.33
Output: 06 Promote coffee production in Northern Uganda (Number of Shade tree seed)	40,000	20,000	500	500	0.13
Output: 06 Promote coffee production in Northern Uganda/Support establishment of large scale coffee farms (Number of large scale farms)	141,750	70,000	405,000	200,000	0.47
Output: 06 Promote coffee production in Northern Uganda/ Awareness created on Coffee farming as a Business through Awareness Campaign (Number of Promotions)	87,600	1,800	547	182	0.29
Output: 02 Enhancement of Coffee Quality at post-harvest level (Number of task forces)	160,872	132,816	528	969	0.53
Output: 02 Engagements to build capacity of stakeholders at buyer and processor level (Number of engagements)	9,000	6,520	9	9	0.03
Output: 03 Coffee Extension Liaison and Coordination/Inter-Regional Farmers' Study Tours (Number of study Tours)	15,000	18,000	23	20	0.04
Output:01 Coordination of Program Activities, research and Coordination/ Supervision and Monitoring Visits (Number of Field Supervision visits)	146,166	56,842	43	23	0.49

Output: 03 Coffee Platforms Functional through Coordination of Coffee Production Campaign (Number of coffee Platforms Coordinated)	400,000	313,500	34	26	1.30
Output: 03 Adoption of Good Nursery practices. (Number of Nurseries Certified)	16,640	16,640	600	587	0.05
Programme Performance	**30,123,019**				**79.91%**

Source: Field findings

Challenges

i) Delayed and partial implementation of planned field activities due to slow disbursement of operational funds and inputs from the UCDA Headquarters to the regional offices and inadequate staff in the regional offices.
ii) By 1st July 2018, the UCDA had arrears amounting to Ug shs 106.099 billion mainly for private suppliers of coffee seedlings. This was crippling the private nursery operators who were reducing the level of seedling production.
iii) Low production and productivity due to lack of water for production, inadequate funds for rehabilitating old fields

Recommendations

i) The UCDA should decentralize some of the finances and administrative roles to the regional offices to enable faster implementation of planned activities.
ii) The MFPED and UCDA should prioritise payment of outstanding arrears in the coffee sector.
iii) The UCDA should review and refocus funds from the replanting programme to supporting rehabilitation and maintenance of older fields, and provision of water for production facilities and value addition equipment.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusion

The overall semi-annual performance of the agriculture sector during FY 2018/19 was fair (61.80%). The BoU/MFPED, UCDA, LGs and CDO were the best performers, while the MAAIF and NARO were the worst performers. Whereas releases from MFPED to MDAs were generally timely, the pace of disbursements from MAAIF, sector agencies and District Collection Accounts to spending departments was slow and a significant amount of released funds were not spent.

The poor resource disbursement resulted in delayed or non-implementation of planned activities. Slow disbursements were on account of late submission of accountabilities for spent funds by lower local governments (LLGs); late approval of requisitions by Accounting Officers; transition from Tier 2 to Tier 1 on the Integrated Financial Management System (IFMS); and slow execution of procurement processes. Front loaded funds were not spent, indicating poor cash flow forecasting.

However, despite the slow funds disbursement and implementation processes, there were major improvements in service delivery within the agriculture sector in line with the budget strategy for FY 2018/19. Good performance was associated with timely and direct releases of the Extension Grant to the LGs, increased access by farmers to extension workers, enhanced provision of water for production facilities, increased budgets for some of the agencies, improved access to the Agricultural Credit Facility, and reduced absenteeism of agricultural staff in the districts.

There was increased adoption of improved farming practices by farmers countrywide due to improved access to extension services. The MAAIF excavated 113 community valley tanks, dams and ponds country wide, cleared 12,500 acres of bush, opened and improved 382km of farm access roads, ploughed and planted 8,500 acres of farm land and has trained 40 operators and technicians to sustain the intervention. Farmers accessed strategic inputs and equipment under the Agricultural Advisory Services programme.

Among the key challenges affecting performance were slow disbursement of funds to spending agencies; late submission of accountabilities; diversion of funds to other ministry activities; delayed initiation of procurements; inadequate research funds after the closure of the donor project; land wrangles and encroachment; inadequate infrastructure for genetic breeding and insufficient inputs.

4.2 Recommendations

i) The MFPED should hold accountable all Accounting Officers at central and LG level to enforce the PFM regulations.

ii) The MFPED should provide bridge financing to sustain the research and breeding work that was ongoing under the ATAAS project and identify additional sources of funding for the agricultural research programme
iii) The MFPED should enforce compliance of Accounting Officers and Heads or Departments to PFM regulations regarding timely disbursement and accountability of funds.
iv) The MFPED and MAAIF should merge the PMG and AEG into one grant for the production department in LGs.
v) The MAAIF and Operation Wealth Creation Secretariat should review and restructure the NAADS/OWC to move away from distributing inputs to focusing funds on mechanisation and provision of value addition and agro-processing machinery and equipment.
vi) The MAAIF should collaborate with the Ministry of Lands, Housing and Urban Development, Uganda Land Commission and Tribunals to resolve all outstanding land related conflicts in Government land for agricultural sector institutions, demarcate boundaries and title all the lands.
vii) The MFPED and MAAIF should prioritise funding for conducting the Uganda Agricultural Census to produce credible data to aid planning in the sector.

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Annex

Annex 1: Agriculture Sector Programmes Monitored for FY 2018/19 semi-annual

Vote	Programme	Sampled sub-programmes	Sampled districts/ Institutions
008 MFPED	Agricultural Credit Facility	Agricultural credit facility projects	Masindi, Mbarara, Tororo, Wakiso
152 NAADS	Agricultural Advisory Services	01 Headquarters 0903 Government purchases	Arua, Bushenyi, Gulu, Iganga, Isingiro, Jinja, Kabale, Kaliro, Kamuli, Kiryandongo, Kole, Lira, Mbarara, Nebbi, Oyam, Rukungiri, Tororo, Zombo
142 NARO	Agricultural Research	01 Headquarters 0382 Support for NARO 08 NaFRRI 13 Abi ZARDI 15 Kachwekano ZARDI 16 Mukono ZARDI 17 Ngetta ZARDI 19 Mbarara ZARDI 27 National Coffee Research Institute (NACORI)	NARO Secretariat, Jinja, Arua, Mbarara, Kabale, Mukono, Lira, Wakiso
Vote 155 CDO	Cotton Development	01 Headquarters 1219 Cotton Production Improvement	CDO Headquarters, East Acholi. West Acholi and East Madi, West Nile, South Eastern/Busoga, Middle Western Central and Tororo/Butaleja.
Vote 160 UCDA	Coffee Development	01 Development Services 02 Strategy and Business Development 03 Quality and Regulatory Services	
Vote 125 NAGRC	Breeding and Genetic Development	01 Headquarters 02 Dairy Cattle 03 Beef cattle 04 Poultry 05 Small ruminants and non ruminants 06 Pasture and feeds	Livestock Experimental Station (LES) – Wakiso, Lusenke Stock Farm – Kayunga, Kasolwe Stock Farm – Kamuli, Maruzi Ranch – Apac, Njeru Stock Farm – Buikwe, Nshaara Ranch – Kiruhura, Sanga Field Station – Kiruhura, Ruhengyere Field station

		08 National Animal Data Bank	- Kiruhura
		09 Fish breeding and production	
		10 ARTs	
		1325 NAGRC Strategic Intervention for Animal Genetics Improvement Project	
	02 Directorate of Animal Resources	Meat Export Support Services (1358)	MAAIF, Kyankwanzi, Gomba
	03 Directorate of Agricultural Extension and Skills Development	26 Directorate of Agricultural Extension Services	Arua, Bushenyi, Gulu, Iganga, Isingiro, Jinja, Kabale, Kaliro, Kamuli, Kiryandongo, Kole, Lira, Mbarara, Nebbi, Oyam, Rukungiri, Tororo, Zombo
500 LGs	District Production Services	0100 Production Department – Agricultural Extension Grant	Arua, Bushenyi, Gulu, Iganga, Isingiro, Jinja, Kabale, Kaliro, Kamuli, Kiryandongo, Kole, Lira, Mbarara, Nebbi, Oyam, Rukungiri, Tororo, Zombo
		04 Production and Marketing	

Source: Author's Compilation