

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

V1: Summary of Issues in Budget Execution**Table V1.1: Overview of Vote Expenditures (US\$ Billion)**

	Approved Budget	Revised Budget	Released by End Q2	Spent by End Q2	% Budget Released	% Budget Spent	% Releases Spent
Recurrent Wage	38.811	39.811	19.906	19.903	51.3 %	51.3 %	100.0 %
Recurrent Non-Wage	29.397	29.397	20.028	13.007	68.1 %	44.2 %	64.9 %
Devt. GoU	48.575	48.575	21.162	12.284	43.6 %	25.3 %	58.0 %
Devt. Ext Fin.	0.000	0.000	0.000	0.000	0.0 %	0.0 %	0.0 %
GoU Total	116.783	117.783	61.096	45.194	52.3 %	38.7 %	74.0 %
Total GoU+Ext Fin (MTEF)	116.783	117.783	61.096	45.194	52.3 %	38.7 %	74.0 %
Arrears	0.144	0.144	0.144	0.144	100.2 %	100.2 %	100.0 %
Total Budget	116.927	117.927	61.240	45.338	52.4 %	38.8 %	74.0 %
<i>A.I.A Total</i>	0.000	0.000	0.000	0.000	0.0 %	0.0 %	0.0 %
Grand Total	116.927	117.927	61.240	45.338	52.4 %	38.8 %	74.0 %
Total Vote Budget Excluding Arrears	116.783	117.783	61.096	45.194	52.3 %	38.7 %	74.0 %

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table V1.2: Releases and Expenditure by Programme and Sub-SubProgramme*

<i>Billion Uganda Shillings</i>	Approved Budget	Revised Budget	Released by End Q2	Spent by End Q2	% Budget Released	% Budget Spent	%Releases Spent
Programme:01 Agro-Industrialization	116.927	117.927	61.239	45.338	52.4 %	38.8 %	74.0 %
Sub SubProgramme:01 Agricultural Research	116.927	117.927	61.239	45.338	52.4 %	38.8 %	74.0 %
Total for the Vote	116.927	117.927	61.239	45.338	52.4 %	38.8 %	74.0 %

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table V1.3: High Unspent Balances and Over-Expenditure in the Approved Budget (Ushs Bn)**(i) Major unspent balances****Departments , Projects****Sub SubProgramme:01 Agricultural Research****Sub Programme: 01 Institutional Strengthening and Coordination**

1.642	Bn Shs	Department : 007 NARO-SECRETARIATE
Reason: Payments through IFMS System delayed to be passed IFMS Suppliers registration details issues NARO Agric research activities interrupted by the Seed and Food Security intervention introduced during the quarter. Payments through IFMS System delayed to be passed through at MoFPED		
NARO Agric research activities interrupted by the Seed and Food Security intervention introduced during the quarter.		
Changing the workplan to cater for the Seed and Food security intervention caused a delay in implementation of the programmes		

Items

0.970	UShs	212101 Social Security Contributions
Reason: Payments through IFMS System delayed to be passed through at MoFPED		
0.307	UShs	212103 Incapacity benefits (Employees)
Reason: a further review of the beneficiaries' information		

Sub Programme: 02 Agricultural Production and Productivity

1.642	Bn Shs	Department : 007 NARO-SECRETARIATE
Reason: Payments through IFMS System delayed to be passed IFMS Suppliers registration details issues NARO Agric research activities interrupted by the Seed and Food Security intervention introduced during the quarter. Payments through IFMS System delayed to be passed through at MoFPED		
NARO Agric research activities interrupted by the Seed and Food Security intervention introduced during the quarter.		
Changing the workplan to cater for the Seed and Food security intervention caused a delay in implementation of the programmes		

Items

3.159	UShs	228001 Maintenance-Buildings and Structures
Reason: NARO Agric research original workplan activities were interrupted by the Seed and Food Security intervention introduced during the quarter.		
1.569	UShs	224011 Research Expenses
Reason: Changing the workplan to cater for the Seed and Food security intervention caused a delay in implementation of the programmes IFMS Suppliers registration details issues		
0.249	UShs	224003 Agricultural Supplies and Services
Reason: NARO Agric research activities interrupted by the Seed and Food Security interventions introduced during the quarter		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

(i) Major unspent balances**Departments , Projects****Sub SubProgramme:01 Agricultural Research****Sub Programme: 02 Agricultural Production and Productivity**

0.661	Bn Shs	Project : 1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)
--------------	---------------	--

Reason: Seed and Food Security intervention funds to farmers was sent late during the quarter as the intervention was introduced late which required serious workplan thus activities causing a delayed transfer of funds to suppliers of agricultural inputs.

Payment failed to go through the IFMS payment system by the end of the quarter.

Items

0.213	UShs	224003 Agricultural Supplies and Services
--------------	-------------	---

Reason: Seed and Food Security intervention was introduced to NARO late in Q1, without a Supplementary funding. This called for a need to reallocate funds from the original intended activities to the new intervention of Seed and Food Security. This caused a delay in remitting and supplying the selected Suppliers of the required Agric inputs.

0.130	UShs	211106 Allowances (Incl. Casuals, Temporary, sitting allowances)
--------------	-------------	--

Reason: Payment failed to go through the IFMS paying system by the end of the quarter, due to late implementation of the intervention of Seed and Food Security intervention which was introduced late in QTR 1

0.120	UShs	227004 Fuel, Lubricants and Oils
--------------	-------------	----------------------------------

Reason: Payment failed to go through the IFMS paying system by the end of the quarter, due to late implementation of the new intervention of Seed and Food Security which was introduced late in QTR 1.

0.070	UShs	224011 Research Expenses
--------------	-------------	--------------------------

Reason: Seed and Food Security intervention called for replanning and reallocation of funds which led to late payments which did not go through IFMS system by the end of the quarter.

0.050	UShs	228003 Maintenance-Machinery & Equipment Other than Transport Equipment
--------------	-------------	---

Reason: Payment failed to go through the IFMS system up to early quarter 3, at MoFPED. This was outside NARO's control.

8.123	Bn Shs	Project : 1619 Retooling of National Agricultural Research Organization
--------------	---------------	---

Reason: Seed and Food Security funds to farmers was sent late during the quarter as the intervention was introduced late which required serious workplan and reallocation of funds from the original workplan activities.

Seed and food security funds sent late to farmers.

Abrupt change of the workplan to accommodate the new intervention

Items

1.894	UShs	312212 Light Vehicles - Acquisition
--------------	-------------	-------------------------------------

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

*(i) Major unspent balances***Departments , Projects****Sub SubProgramme:01 Agricultural Research****Sub Programme: 02 Agricultural Production and Productivity**

8.123	Bn Shs	Project : 1619 Retooling of National Agricultural Research Organization
--------------	---------------	---

Reason: Seed and Food Security funds to farmers was sent late during the quarter as the intervention was introduced late which required serious workplan and reallocation of funds from the original workplan activities.

Seed and food security funds sent late to farmers.

Abrupt change of the workplan to accommodate the new intervention

Items

Reason: NARO was advised to re do the procurement method by the Solicitor General . So this caused delay in finalisation of the payment to Toyota Uganda Ltd. during the quarter.

1.193	UShs	224005 Laboratory supplies and services
--------------	-------------	---

Reason: Seed and Food Security funds to farmers was sent late during the quarter as the intervention was introduced late which required serious workplan and reallocation of funds from the original workplan activities

0.730	UShs	224011 Research Expenses
--------------	-------------	--------------------------

Reason:

0.568	UShs	224003 Agricultural Supplies and Services
--------------	-------------	---

Reason: Seed and food security funds sent late to farmers during the quarter as the intervention was introduced late which required changing and reallocation of funds from from the original workplan activities thus delayed transfer of funds to selected farming institutes to implement the intervention.

0.520	UShs	228001 Maintenance-Buildings and Structures
--------------	-------------	---

Reason: Payments delayed at IFMS to be paid

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

V2: Performance Highlights**Table V2.1: PIAP outputs and output Indicators**

Programme:01 Agro-Industrialization			
SubProgramme:01 Institutional Strengthening and Coordination			
Sub SubProgramme:01 Agricultural Research			
Department:007 NARO-SECRETARIATE			
Budget Output: 000001 Audit and Risk Management			
PIAP Output: 01040701 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of improved cotton varieties developed	Number	6	
Budget Output: 000014 Administrative and Support Services			
PIAP Output: 01040701 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	14	7
Number of improved technologies and innovations adopted	Number	20	10
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:001 Abi Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	4	2
Number of functional public-private partnerships established for technology development and promotion	Number	4	2
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	1	0
Number of functional public-private partnerships established for technology development and promotion	Number	2	1

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:001 Abi Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of improved technologies and innovations adopted	Number	3	0
Number of markets created along product lines	Number	1	0
Number of research products and services for food and nutrition security generated	Number	1	1
Number of research products and services suitable for industry developed	Number	1	0
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of District Adaptive Research Support Teams (DARSTs) developed	Number	6	3
Number of technologies adopted	Number	8	4
Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	4	2
Number of improved technologies and innovations adopted	Number	4	2
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	2	2
Number of improved technologies and innovations adopted	Number	4	1
Number of research products and services for food and nutrition security generated	Number	2	1

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of District Adaptive Research Support Teams (DARSTs) developed	Number	2	0
Number of technologies adopted	Number	2	1
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of research products and services for food and nutrition security generated	Number	2	1
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of District Adaptive Research Support Teams (DARSTs) developed	Number	2	1
Number of technologies adopted	Number	4	1
Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	1	0
Number of improved technologies and innovations adopted	Number	9	2
Number of research products and services for food and nutrition security generated	Number	5	2
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of District Adaptive Research Support Teams (DARSTs) developed	Number	2	0

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of technologies adopted	Number	9	4
Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	2	1
Number of improved technologies and innovations adopted	Number	7	0
Number of research products and services suitable for industry developed	Number	1	1
Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	5	1
Number of improved technologies and innovations adopted	Number	7	1
Number of markets created along product lines	Number	2	0
Number of research products and services for food and nutrition security generated	Number	4	1
Number of research products and services suitable for industry developed	Number	2	1
Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	6	1

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI)			
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	3	1
Number of improved technologies and innovations adopted	Number	14	1
Number of markets created along product lines	Number	3	0
Number of research products and services for food and nutrition security generated	Number	3	1
Department:007 NARO-SECRETARIATE			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	14	5
Number of research products and services for food and nutrition security generated	Number	15	2
Department:008 National Agricultural Research Laboratories			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	4	1
Number of functional public-private partnerships established for technology development and promotion	Number	4	3
Number of improved technologies and innovations adopted	Number	4	2
Number of research products and services for food and nutrition security generated	Number	6	2
Number of research products and services suitable for industry developed	Number	8	2

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:009 National Coffee Research Institute			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	6	3
Number of improved technologies and innovations adopted	Number	3	0
Number of market responsive coffee varieties developed	Number	3	0
Number of research products and services for food and nutrition security generated	Number	3	1
Number of research products and services suitable for industry developed	Number	6	2
Department:010 National Crops Resources Research Institute			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	10	5
Number of functional public-private partnerships established for technology development and promotion	Number	12	4
Number of improved technologies and innovations adopted	Number	19	1
Number of markets created along product lines	Number	3	0
Number of research products and services for food and nutrition security generated	Number	12	4
Number of research products and services suitable for industry developed	Number	5	3
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of technologies adopted	Number	5	2

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:011 National Fisheries Resources Research Institute			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	5	1
Number of functional public-private partnerships established for technology development and promotion	Number	3	1
Number of improved technologies and innovations adopted	Number	3	0
Number of markets created along product lines	Number	2	.0
Number of research products and services for food and nutrition security generated	Number	3	2
Number of research products and services suitable for industry developed	Number	3	3
Department:012 National Forestry Resources Research Institute			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	3	1
Number of functional public-private partnerships established for technology development and promotion	Number	2	1
Number of improved technologies and innovations adopted	Number	2	0
Number of research products and services for food and nutrition security generated	Number	2	1
Number of research products and services suitable for industry developed	Number	2	1
Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	2	2
Number of functional public-private partnerships established for technology development and promotion	Number	5	2

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of improved technologies and innovations adopted	Number	2	0
Number of research products and services for food and nutrition security generated	Number	1	1
Number of research products and services suitable for industry developed	Number	2	0
Department:014 National Livestock Resources Research Institute (NaLIRRI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	1	1
Number of functional public-private partnerships established for technology development and promotion	Number	1	1
Number of improved technologies and innovations adopted	Number	1	0
Number of markets created along product lines	Number	1	0
Number of Niche markets for livestock industrial products created	Number	1	0
Number of research products and services for food and nutrition security generated	Number	1	1
Number of research products and services suitable for industry developed	Number	1	2
Department:015 National Semi Arid Resources Research Institute (NaSARRI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	2	1
Number of functional public-private partnerships established for technology development and promotion	Number	3	0
Number of improved cotton varieties developed	Number	3	1
Number of improved technologies and innovations adopted	Number	3	0

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:015 National Semi Arid Resources Research Institute (NaSARRI)			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of markets created along product lines	Number	3	0
Number of research products and services for food and nutrition security generated	Number	8	2
Number of research products and services suitable for industry developed	Number	6	2
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	5	2
Department:016 Ngetta ZARDI			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	5	1
Number of functional public-private partnerships established for technology development and promotion	Number	1	0
Number of improved technologies and innovations adopted	Number	3	1
Number of research products and services for food and nutrition security generated	Number	3	1
Department:017 Rwebitaba ZARDI			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	4	1
Number of functional public-private partnerships established for technology development and promotion	Number	18	2

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:017 Rwebitaba ZARDI			
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of improved technologies and innovations adopted	Number	6	0
Number of markets created along product lines	Number	4	0
Number of research products and services for food and nutrition security generated	Number	4	1
Number of research products and services suitable for industry developed	Number	4	1
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)			
Budget Output: 000017 Infrastructure Development and Management			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of research products and services suitable for industry developed	Number	13	3
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of research products and services suitable for industry developed	Number	13	3
Project:1619 Retooling of National Agricultural Research Organization			
Budget Output: 000003 Facilities and Equipment Management			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of research products and services for food and nutrition security generated	Number	10	2

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Programme:01 Agro-Industrialization			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Project:1619 Retooling of National Agricultural Research Organization			
Budget Output: 010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of market-oriented products generated	Number	6	2
Budget Output: 010009 Research Partnerships			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of functional public-private partnerships established for technology development and promotion	Number	12	5
Budget Output: 010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of research products and services suitable for industry developed	Number	10	4
Budget Output: 010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 2
Number of improved technologies and innovations adopted	Number	36	5

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Performance highlights for the Quarter

The National Agricultural Research Organisation (NARO), developed four anti-tick vaccines which are Brown ear tick, blue tick, bont tick and cocktail 1, 2, 3. During the reporting period, NARO launched an anti-tick vaccine final trials in Mbarara. The vaccine has the solutions to farmers' problems regarding tick problem affecting farmers livestock. The development of four anti-tick vaccines is a breakthrough which is expected to give a long-lasting solution to ticks in farmers livestock.

NARO has been strengthening partnerships which included Nile Breweries in industry, seed companies among others.

NARO has just published the final impact assessment report on the maize and beans technologies in Uganda. The report highlights the contribution of the two commodities to the economy of Uganda. NARO has initiated another impact assessment study on sorghum technologies.

Variances and Challenges

On station research is heavily dependent on rain-fed agriculture. There is need for NARO to strengthen the institutes with irrigation facilities to mitigate the effects of drought.

Transport facilities are such a huge challenge which impend work and partnership engagements requiring movement and are in tough rural terrain.

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

V3: Details of Releases and Expenditure

Table V3.1: GoU Releases and Expenditure by Budget Output*

<i>Billion Uganda Shillings</i>	Approved Budget	Revised Budget	Released by End Q2	Spent by End Q2	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
Programme:01 Agro-Industrialization	116.927	117.927	61.239	45.339	52.4 %	38.8 %	74.0 %
Sub SubProgramme:01 Agricultural Research	116.927	117.927	61.239	45.339	52.4 %	38.8 %	74.0 %
000001 Audit and Risk Management	0.121	0.121	0.090	0.055	74.4%	45.5%	61.1%
000003 Facilities and Equipment Management	17.270	17.270	2.044	0.000	11.8%	0.0%	0.0%
000014 Administrative and Support Services	54.546	55.546	29.459	27.849	54.0%	51.1%	94.5%
000017 Infrastructure Development and Management	5.719	5.719	0.294	0.250	5.1%	4.4%	85.0%
010008 Capacity Strengthening	20.433	20.433	14.313	7.698	70.0%	37.7%	53.8%
010009 Research Partnerships	1.800	1.800	0.600	0.600	33.3%	33.3%	100.0%
010010 Technology Generation	11.698	11.698	9.877	6.219	84.4%	53.2%	63.0%
010011 Technology Promotion	5.341	5.341	4.562	2.668	85.4%	50.0%	58.5%
Total for the Vote	116.927	117.927	61.239	45.339	52.4 %	38.8 %	74.0 %

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table V3.2: GoU Expenditure by Item 2022/23 GoU Expenditure by Item

<i>Billion Uganda Shillings</i>	Approved Budget	Revised Budget	Released by End Q2	Spent by End Q2	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
211102 Contract Staff Salaries	38.811	39.811	19.906	19.903	51.3 %	51.3 %	100.0 %
211104 Employee Gratuity	9.703	9.703	4.851	4.851	50.0 %	50.0 %	100.0 %
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	1.978	1.978	1.475	0.667	74.6 %	33.7 %	45.2 %
211107 Boards, Committees and Council Allowances	0.762	0.762	0.290	0.265	38.1 %	34.8 %	91.2 %
212101 Social Security Contributions	3.881	3.881	2.911	1.941	75.0 %	50.0 %	66.7 %
212102 Medical expenses (Employees)	0.850	0.850	0.800	0.648	94.1 %	76.3 %	81.0 %
212103 Incapacity benefits (Employees)	0.635	0.635	0.477	0.170	75.0 %	26.8 %	35.7 %
221001 Advertising and Public Relations	0.411	0.411	0.218	0.137	53.1 %	33.2 %	62.6 %
221003 Staff Training	1.009	1.009	0.301	0.090	29.8 %	8.9 %	29.9 %
221004 Recruitment Expenses	0.060	0.060	0.000	0.000	0.0 %	0.0 %	0.0 %
221007 Books, Periodicals & Newspapers	0.048	0.048	0.032	0.016	66.9 %	33.3 %	49.8 %
221008 Information and Communication Technology Supplies.	0.357	0.357	0.144	0.108	40.4 %	30.3 %	74.9 %
221009 Welfare and Entertainment	0.407	0.407	0.284	0.161	69.9 %	39.7 %	56.8 %
221011 Printing, Stationery, Photocopying and Binding	0.539	0.539	0.301	0.130	55.9 %	24.2 %	43.2 %
221012 Small Office Equipment	0.050	0.050	0.031	0.026	62.9 %	53.0 %	84.3 %
221016 Systems Recurrent costs	0.030	0.030	0.015	0.011	50.0 %	35.5 %	71.0 %
221017 Membership dues and Subscription fees.	0.066	0.066	0.030	0.024	45.2 %	36.6 %	81.1 %
222001 Information and Communication Technology Services.	0.415	0.415	0.198	0.160	47.7 %	38.6 %	80.9 %
222002 Postage and Courier	0.040	0.040	0.021	0.016	52.9 %	40.8 %	77.1 %
223001 Property Management Expenses	0.142	0.142	0.116	0.089	81.4 %	62.8 %	77.1 %
223002 Property Rates	0.034	0.034	0.003	0.003	9.8 %	9.8 %	100.0 %
223004 Guard and Security services	0.299	0.299	0.205	0.183	68.4 %	61.2 %	89.5 %
223005 Electricity	0.277	0.277	0.195	0.173	70.2 %	62.2 %	88.7 %
223006 Water	0.090	0.090	0.067	0.061	74.1 %	67.2 %	90.7 %
224001 Medical Supplies and Services	0.040	0.040	0.027	0.027	68.6 %	68.6 %	100.0 %
224002 Veterinary supplies and services	0.162	0.162	0.097	0.053	59.8 %	32.4 %	54.2 %
224003 Agricultural Supplies and Services	3.532	3.532	3.342	2.251	94.6 %	63.7 %	67.4 %
224004 Beddings, Clothing, Footwear and related Services	0.081	0.081	0.056	0.051	68.4 %	63.2 %	92.5 %
224005 Laboratory supplies and services	1.763	1.763	1.416	0.184	80.3 %	10.4 %	13.0 %

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

<i>Billion Uganda Shillings</i>	Approved Budget	Revised Budget	Released by End Q2	Spent by End Q2	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
224010 Protective Gear	0.018	0.018	0.016	0.005	91.0 %	27.1 %	29.8 %
224011 Research Expenses	14.827	14.827	13.801	10.320	93.1 %	69.6 %	74.8 %
225101 Consultancy Services	0.509	0.509	0.136	0.038	26.8 %	7.4 %	27.5 %
225201 Consultancy Services-Capital	0.120	0.120	0.000	0.000	0.0 %	0.0 %	0.0 %
225202 Environment Impact Assessment for Capital Works	0.100	0.100	0.007	0.000	7.0 %	0.0 %	0.0 %
225204 Monitoring and Supervision of capital work	0.466	0.466	0.120	0.106	25.8 %	22.8 %	88.3 %
226001 Insurances	0.077	0.077	0.072	0.007	93.1 %	8.9 %	9.6 %
226002 Licenses	0.098	0.098	0.049	0.020	50.0 %	20.7 %	41.5 %
227001 Travel inland	0.747	0.747	0.496	0.134	66.4 %	18.0 %	27.0 %
227003 Carriage, Haulage, Freight and transport hire	0.019	0.019	0.015	0.006	78.9 %	31.6 %	40.1 %
227004 Fuel, Lubricants and Oils	1.244	1.244	0.974	0.494	78.3 %	39.7 %	50.8 %
228001 Maintenance-Buildings and Structures	6.319	6.319	4.002	0.324	63.3 %	5.1 %	8.1 %
228002 Maintenance-Transport Equipment	0.581	0.581	0.355	0.261	61.1 %	44.9 %	73.4 %
228003 Maintenance-Machinery & Equipment Other than Transport Equipment	0.374	0.374	0.248	0.181	66.2 %	48.4 %	73.1 %
228004 Maintenance-Other Fixed Assets	0.125	0.125	0.045	0.038	36.4 %	30.2 %	83.0 %
262201 Contributions to International Organisations-Capital	1.785	1.785	0.600	0.600	33.6 %	33.6 %	100.0 %
273102 Incapacity, death benefits and funeral expenses	0.017	0.017	0.012	0.012	66.1 %	66.1 %	100.0 %
282201 Contributions to Non-Government Institutions	0.015	0.015	0.000	0.000	0.0 %	0.0 %	0.0 %
312121 Non-Residential Buildings - Acquisition	4.712	4.712	0.256	0.250	5.4 %	5.3 %	97.6 %
312139 Other Structures - Acquisition	0.862	0.862	0.018	0.000	2.1 %	0.0 %	0.0 %
312212 Light Vehicles - Acquisition	5.981	5.981	1.894	0.000	31.7 %	0.0 %	0.0 %
312221 Light ICT hardware - Acquisition	0.150	0.150	0.000	0.000	0.0 %	0.0 %	0.0 %
312222 Heavy ICT hardware - Acquisition	0.164	0.164	0.000	0.000	0.0 %	0.0 %	0.0 %
312229 Other ICT Equipment - Acquisition	0.400	0.400	0.000	0.000	0.0 %	0.0 %	0.0 %
312232 Electrical machinery - Acquisition	0.025	0.025	0.020	0.000	80.0 %	0.0 %	0.0 %
312233 Medical, Laboratory and Research & appliances - Acquisition	10.555	10.555	0.150	0.000	1.4 %	0.0 %	0.0 %
312235 Furniture and Fittings - Acquisition	0.020	0.020	0.000	0.000	0.0 %	0.0 %	0.0 %
352882 Utility Arrears Budgeting	0.144	0.144	0.144	0.144	100.0 %	100.0 %	100.0 %
Total for the Vote	116.927	117.927	61.239	45.338	52.4 %	38.8 %	74.0 %

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table V3.3: Releases and Expenditure by Department and Project*

<i>Billion Uganda Shillings</i>	Approved Budget	Revised Budget	Released by End Q2	Spent by End Q2	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
Programme:01 Agro-Industrialization	116.927	117.927	61.239	45.338	52.37 %	38.77 %	74.03 %
Sub SubProgramme:01 Agricultural Research	116.927	117.927	61.239	45.338	52.37 %	38.77 %	74.0 %
Departments							
001 Abi Zonal Agriculture Research Institute(ZARDI)	0.117	0.117	0.088	0.088	75.0 %	75.0 %	100.0 %
002 Buginyaya Zonal Agriculture Research Institute(ZARDI)	0.272	0.272	0.200	0.200	73.6 %	73.6 %	100.0 %
003 Bulindi Zonal Agriculture Research Institute(ZARDI)	0.139	0.139	0.119	0.119	85.4 %	85.4 %	100.0 %
004 Kachwekano Zonal Agriculture Research Institute(ZARDI)	0.214	0.214	0.144	0.144	67.3 %	67.3 %	100.0 %
005 Mbarara Zonal Agriculture Research Institute(ZARDI)	0.117	0.117	0.088	0.088	75.0 %	75.0 %	100.0 %
006 Nabuin Zonal Agriculture Research Institute(ZARDI)	0.117	0.117	0.088	0.088	75.0 %	75.0 %	100.0 %
007 NARO-SECRETARIATE	64.993	65.993	37.575	30.552	57.8 %	47.0 %	81.3 %
008 National Agricultural Research Laboratories	0.300	0.300	0.225	0.225	75.0 %	75.0 %	100.0 %
009 National Coffee Research Institute	0.197	0.197	0.148	0.148	75.0 %	75.0 %	100.0 %
010 National Crops Resources Research Institute	0.247	0.247	0.185	0.185	75.0 %	75.0 %	100.0 %
011 National Fisheries Resources Research Institute	0.197	0.197	0.148	0.148	75.0 %	75.0 %	100.0 %
012 National Forestry Resources Research Institute	0.125	0.125	0.094	0.094	75.0 %	75.0 %	100.0 %
013 Mukono Zonal Agriculture Research Institute (ZARDI)	0.264	0.264	0.198	0.198	75.0 %	75.0 %	100.0 %
014 National Livestock Resources Research Institute (NaLIRRI)	0.622	0.622	0.457	0.457	73.5 %	73.5 %	100.0 %
015 National Semi Arid Resources Research Institute (NaSARRI)	0.122	0.122	0.092	0.092	75.0 %	75.0 %	100.0 %
016 Ngetta ZARDI	0.117	0.117	0.088	0.088	75.0 %	75.0 %	100.0 %
017 Rwebitaba ZARDI	0.192	0.192	0.142	0.142	74.2 %	74.2 %	100.0 %
Development Projects							
1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)	7.719	7.719	1.798	1.131	23.3 %	14.7 %	62.9 %
1619 Retooling of National Agricultural Research Organization	40.856	40.856	19.364	11.153	47.4 %	27.3 %	57.6 %
Total for the Vote	116.927	117.927	61.239	45.338	52.4 %	38.8 %	74.0 %

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table V3.4: External Financing Releases and Expenditure by Sub-SubProgramme and Project

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Quarter 2: Outputs and Expenditure in the Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Programme:01 Agro-Industrialization		
SubProgramme:01 Institutional Strengthening and Coordination		
Sub SubProgramme:01 Agricultural Research		
<i>Departments</i>		
Department:007 NARO-SECRETARIATE		
Budget Output:000001 Audit and Risk Management		
PIAP Output: 01040701 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research.	2 audit staff attained procurement skills(Value for money audits) through training organised by ICPAU. 1 staff facilitated to attend Certified Internal Audit training by the Institute of Internal Auditors. 4 Audit Staff at PARIs backed stopped at NARL, NaCRRI, MUZARDI and NaCORI. 1 audit report on special assignment produced. One audit report on the status of implemnting audit recommendations produced. Risk Management reviews and meetings mitigation meetings held at NaCRRI. One audit report on the status of implementing audit recommendations for FY2021/2022 produced at by Secretariat staff. Draft Biological Assets register formulate at tested at NaLIRRI. One report produced on validation of NARO Land at KaZARDI, NaRL, NaFIRRI and NaCRRI. One report on the on-going Capital development audit report produced. One draft Audit report on Assets Management and Land use produced with recommendations to management advising on controls that ensure NARO assets are well maintained.	-
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
221003 Staff Training		3,543.360
224011 Research Expenses		21,900.000
	Total For Budget Output	25,443.360
	Wage Recurrent	0.000
	Non Wage Recurrent	25,443.360
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:000014 Administrative and Support Services		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040701 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Annual subscription for insurance of research vessels, machinery and equipment maintained. 1Public-Private Partnership established for technology development and transfer ,1 research support infrastructure establishment supported 8 Governing council sessions supported 4 research supervisory support missions conducted	2 Public-Private Partnerships established for technology	Not all planned activities were conducted due to inadequate funds.
	1 research support infrastructure establishment supported	
	1 Governing council sessions supported	
	Medical insurance for 824 staff paid to IML.	
	Payment of Staff Gratutiy for the quarter.	
	Staff facilitated with monthly welfare and daily transport.	
	Supported staff who lost their parents.	
	Consultative meetings with NARO staff both at NAROSEC and the 16 PARIS.	
Expenditures incurred in the Quarter to deliver outputs		UShs Thousand
ItemSpent		
211102 Contract Staff Salaries		10,199,777.318
211104 Employee Gratuity		2,425,694.330
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)		253,069.400
212101 Social Security Contributions		970,277.709
212103 Incapacity benefits (Employees)		56,099.157
221009 Welfare and Entertainment		26,680.000
Total For Budget Output		13,931,597.914
Wage Recurrent		10,199,777.318
Non Wage Recurrent		3,731,820.596
Arrears		0.000
AIA		0.000
Total For Department		13,957,041.274
Wage Recurrent		10,199,777.318
Non Wage Recurrent		3,757,263.956
Arrears		0.000
AIA		0.000
Develoment Projects		
N/A		
SubProgramme:02 Agricultural Production and Productivity		
Sub SubProgramme:01 Agricultural Research		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Departments		
Department:001 Abi Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
3 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 14,000 seedligs of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado	3 Research-extension farmer linkages developed and strengthened. Two MSIPS and one farmer training conducted. 2 newly released root crop varieties introduced to uptake pathways in the west Nile region. 2500 seedligs of (1250) Mango, five thousand (500) Citrus, Ten thousand (1250) Avocado.	
One appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology one fish branded nutritive products one highly nutritious composite products one cereal gene bank established	Germplasm assembled for Tamarind, Shear, Rubber vine and Combratum. Fish At least 20 specimen samples of digestive systems of Hydrocynusvittatus (Castelnau, 1861) (Tiger fish) collected from Lake Albert and submitted to Makerere University Lab for histomorphology description analysis. Cereals one cereal gene bank established for godo sorghum	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
One appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology one fish branded nutritive products one highly nutritious composite products one cereal gene bank established	NA	NA
Expenditures incurred in the Quarter to deliver outputs		
Item		Spent
224011 Research Expenses		18,340.000
Total For Budget Output		18,340.000
Wage Recurrent		0.000
Non Wage Recurrent		18,340.000
Arrears		0.000
AIA		0.000
Budget Output:010011 Technology Promotion		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Initiate One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 1 selected commodity West Nile region initiated	A joint synergy meeting was held with key cassava value chain actors; PALM CORPS business development, Inter-Link Inc,SONALIKA, farmers etc.	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preferred dry land legume variety 1 newly released root crop variety promoted	One functional screen house maintained for on station for production of seedlings 11,250 high quality seedlings each of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preferred dry land legume variety 1 newly released root crop variety promoted	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
221008 Information and Communication Technology Supplies.		250.000
221011 Printing, Stationery, Photocopying and Binding		6,785.000
222001 Information and Communication Technology Services.		187.500
224003 Agricultural Supplies and Services		10,000.000
224011 Research Expenses		20,060.000
227004 Fuel, Lubricants and Oils		2,717.500
	Total For Budget Output	40,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	40,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	58,340.000
	Wage Recurrent	0.000
	Non Wage Recurrent	58,340.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010008 Capacity Strengthening		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 partnership promoted for technology generation 1 research products commercialized 1 research platform established	<p>Data collection on NARO technology adoption in 6 districts of Bukedi sub zone collected . Data cleaning, coding and entry. Work still on-going.</p> <p>2 Aquaculture related partnerships initiated and farmer relations strengthened in the zone</p> <p>3 commodity based partnerships (Bushikan Intergrated Area Cooperative Enterprises Ltd, Bukhoko Dubaana, Buginyanya Upland Company Ltd and Ibero Uganda in Bududa, Namisidwa and Bulambuli districts respectively initiated along the commodity value chain (Arabica coffee)</p> <p>2 partnerships in Dairy management and Wheat/barley enhanced.</p> <p>Four partnerships promoted in the areas of technology development, improved seed uptake and related innovations and other value chain developments. These include: PRiDe, WLF, World Vision, EADEN</p>	-
Expenditures incurred in the Quarter to deliver outputs		US\$ Thousand
Item	Spent	
211107 Boards, Committees and Council Allowances	2,870.000	
212103 Incapacity benefits (Employees)	882.000	
221001 Advertising and Public Relations	2,608.000	
221007 Books, Periodicals & Newspapers	678.000	
221008 Information and Communication Technology Supplies.	3,130.000	
221009 Welfare and Entertainment	600.000	
221011 Printing, Stationery, Photocopying and Binding	2,636.000	
221012 Small Office Equipment	1,044.000	
222001 Information and Communication Technology Services.	11,218.000	
223001 Property Management Expenses	1,564.000	
223004 Guard and Security services	6,522.000	
223005 Electricity	2,088.000	
223006 Water	1,566.000	
224011 Research Expenses	9,132.000	
226001 Insurances	260.000	
227004 Fuel, Lubricants and Oils	2,610.000	
228001 Maintenance-Buildings and Structures	1,304.000	
228002 Maintenance-Transport Equipment	10,600.000	
228003 Maintenance-Machinery & Equipment Other than Transport Equipment	2,610.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
228004 Maintenance-Other Fixed Assets		1,304.000
	Total For Budget Output	65,226.000
	Wage Recurrent	0.000
	Non Wage Recurrent	65,226.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 Industrial products for yield improvement and commercialization developed for industry	soils One NPK fertilizer blend suitable for coffee under trial, first season data collected. coffee Preliminary results showed an increase in number of berries on bearing nodes, which likely implies increase in yield, more data will be collected in the season.	
1 variety with adequate resistance to major pests and diseases developed to support house food security and incomes	Working still on-going on two varieties (potato and arabic coffee) with adequate resistance to major pests and diseases developed to support house food security and incomes. Working still on-going on two packages for sustainable disease management in Arabica coffee and potato developed.	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 pests resistant varieties 2 disease management packages for strategic crops Generate 5 tons of potato seed 5 adaptive trials, demos 1Industrial products for yield improvement 1 scientific paper published	Work still on going for pests resistant varieties and disease management packages for coffee and potato. 5 adaptive trials, and 4 demos for yield improvement . Two scientific paper published.	
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
221011 Printing, Stationery, Photocopying and Binding		1,550.500
221012 Small Office Equipment		535.000
224002 Veterinary supplies and services		500.000
224003 Agricultural Supplies and Services		4,300.000
224011 Research Expenses		4,600.000
227004 Fuel, Lubricants and Oils		1,800.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
228002 Maintenance-Transport Equipment		600.000
	Total For Budget Output	13,885.500
	Wage Recurrent	0.000
	Non Wage Recurrent	13,885.500
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes	Four these papers though accepted have not been published.	Four these papers though accepted have not been published.
4 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies	4 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies	
PIAP Output: 0103020112 Agricultural Research platforms established		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted	3 commodity based partnerships (Bushikan Intergrated Area Cooperative Enterprises Ltd, Bukhoko Dubaana, Buginyanya Upland Company Ltd and Ibero Uganda in Bududa, Namisidwa and Bulambuli districts respectively initiated along the commodity value chain (Arabica coffee)	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)		4,348.000
211107 Boards, Committees and Council Allowances		1,914.000
212103 Incapacity benefits (Employees)		696.000
221001 Advertising and Public Relations		1,740.000
221007 Books, Periodicals & Newspapers		452.000
221008 Information and Communication Technology Supplies.		2,088.000
221009 Welfare and Entertainment		400.000
221011 Printing, Stationery, Photocopying and Binding		2,710.000
221012 Small Office Equipment		696.000
222001 Information and Communication Technology Services.		7,480.000
223001 Property Management Expenses		1,042.000
223004 Guard and Security services		4,346.000
223005 Electricity		1,392.000
223006 Water		1,042.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
224002 Veterinary supplies and services		1,396.500
224003 Agricultural Supplies and Services		2,826.000
224011 Research Expenses		7,370.000
226001 Insurances		174.000
227004 Fuel, Lubricants and Oils		1,740.000
228001 Maintenance-Buildings and Structures		870.000
228002 Maintenance-Transport Equipment		6,958.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		1,740.000
228004 Maintenance-Other Fixed Assets		868.000
	Total For Budget Output	54,288.500
	Wage Recurrent	0.000
	Non Wage Recurrent	54,288.500
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	133,400.000
	Wage Recurrent	0.000
	Non Wage Recurrent	133,400.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 MSIPs (Soybean and Rice) Initiated to promote technologies 1 crop, 1 livestock and 1 post-harvest handling technologies & practices promoted 1 Climate smart agricultural technologies demonstrated	<p>Work initiated one soybean msip.</p> <p>300 Students, 50 farmers and 65 stakeholders (extension workers, district/town councils) , have visited the institute and exposed to crop and livestock technologies.</p> <p>3 acre demos established in sites in 3 districts. Of rice variety NERICA4 Musomesa field school in Kigorobya - Hoima, Mabaale - Kagadi, and Kabwoya - Kikuube. Each site with 32 participants.</p>	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter		Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed	Foundation seed was sourced from NHL for beans, Uganda prison services for UH 5051 hybrid maize and SoyAfrica Makerere University for Soy beans. Total acreage planted 157 of four bean varieties, two soya and one maize variety.		
NA	0.75 acres of seed multiplication fields opened for maize. Developed the protocol and data collection tool to generate information on preferred bee floral resources. Acquired five pollen collecting traps for collection of pollen samples from 5 apiaries (on-station and 4 on-farm		
Expenditures incurred in the Quarter to deliver outputs			UShs Thousand
Item			Spent
221001 Advertising and Public Relations			3,574.286
221007 Books, Periodicals & Newspapers			1,191.428
221008 Information and Communication Technology Supplies.			2,978.572
221009 Welfare and Entertainment			3,574.286
221011 Printing, Stationery, Photocopying and Binding			3,574.286
221012 Small Office Equipment			1,787.142
221017 Membership dues and Subscription fees.			1,191.428
222002 Postage and Courier			595.714
223001 Property Management Expenses			2,382.858
223004 Guard and Security services			5,957.142
224010 Protective Gear			1,191.428
224011 Research Expenses			36,437.142
228002 Maintenance-Transport Equipment			5,957.142
228003 Maintenance-Machinery & Equipment Other than Transport Equipment			4,765.714
273102 Incapacity, death benefits and funeral expenses			1,787.146
Total For Budget Output			76,945.714
Wage Recurrent			0.000
Non Wage Recurrent			76,945.714
Arrears			0.000
AIA			0.000
Total For Department			76,945.714
Wage Recurrent			0.000
Non Wage Recurrent			76,945.714
Arrears			0.000
AIA			0.000
Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI)			

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 technologies promoted 1 technologies for food and nutrition security generated	One new potato variety NAROPOT 6 released. It is resistant to late blight and are good for processing into chips and crisps. NAROPOT 5 promoted good for processing into chips and crisps.	
2 Demand driven agriculture technologies developed and promoted	Two Improved bean varieties have planted in Kihhi Kanungu. 3 new improved upland rice varieties generated by NaCRRRI were targeted not achieved but land for planting the demos has been cleared.	
2 Demand driven agriculture technologies developed and promoted	One new potato variety NAROPOT 6 released. It is resistant to late blight and are good for processing into chips and crisps. NAROPOT 5 promoted good for processing into chips and crisps.	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
211107 Boards, Committees and Council Allowances		800.000
221008 Information and Communication Technology Supplies.		4,000.000
221009 Welfare and Entertainment		3,600.000
221012 Small Office Equipment		700.000
222001 Information and Communication Technology Services.		400.000
223001 Property Management Expenses		4,200.000
223004 Guard and Security services		20,158.000
223005 Electricity		1,600.000
223006 Water		1,500.000
224003 Agricultural Supplies and Services		12,004.000
224011 Research Expenses		23,487.200
226001 Insurances		585.000
227004 Fuel, Lubricants and Oils		8,062.800
228001 Maintenance-Buildings and Structures		10,003.000
228002 Maintenance-Transport Equipment		4,800.000
Total For Budget Output		95,900.000
Wage Recurrent		0.000
Non Wage Recurrent		95,900.000
Arrears		0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	<i>AIA</i>	0.000
	Total For Department	95,900.000
	Wage Recurrent	0.000
	Non Wage Recurrent	95,900.000
	Arrears	0.000
	<i>AIA</i>	0.000

Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI)**Budget Output:010008 Capacity Strengthening****PIAP Output: 01040705 Demand driven agriculture technologies developed****Programme Intervention: 010407 Strengthen agricultural research and technology development**

1 technologies for food, nutrition and industry promoted in 2 districts of the Zone 1 technologies generated for market and Industry 1 Research facilities maintained to support research	One technology (feed supplement) was generated and promoted for the dairy industry promoted in mbarara district. Improved banana varieties were demonstrated on station. Hosted the launch of anti-tick vaccine on station.. Dairy facilities maintained to support research	
---	--	--

Expenditures incurred in the Quarter to deliver outputs *US\$ Thousand*

Item	Spent
224002 Veterinary supplies and services	7,500.000
224003 Agricultural Supplies and Services	5,000.000
224011 Research Expenses	45,900.000
Total For Budget Output	58,400.000
Wage Recurrent	0.000
Non Wage Recurrent	58,400.000
Arrears	0.000
<i>AIA</i>	0.000
Total For Department	58,400.000
Wage Recurrent	0.000
Non Wage Recurrent	58,400.000
Arrears	0.000
<i>AIA</i>	0.000

Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI)**Budget Output:010011 Technology Promotion**

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
NA	Two improved maize varieties for food promoted in the zone. One Maize strategy for control of FAW & desert locusts demonstrated	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1 biological control strategies on FAW and desert locusts determined.	Two technologies for livestock industry promoted in the zone , Managing broccellosis and bracharia mulato for feed. Two biological control strategies on FAW & desert locusts demonstrated determined	
1 adaptable seed varieties produced and availed to farmers, 1 technology of new cereal and 1 pulse varieties adapted to NEAZ farmers	50 kgs of seed of adapted maize and one pulse (jack bean)) varieties were adapted, produced and availed to farmers, in Karamoja zone.	
1 adaptable seed varieties produced and availed to farmers, 1 technology of new cereal and 1 pulse varieties adapted to NEAZ farmers	50 kgs of seed of Maize -Hybrid (UH5051 certified) maize and one pulse varieties (jack bean)) were produced and availed to farmers, in Karamoja zone.	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item	Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	6,750.000	
211107 Boards, Committees and Council Allowances	2,500.000	
212103 Incapacity benefits (Employees)	750.000	
221001 Advertising and Public Relations	1,000.000	
221009 Welfare and Entertainment	950.000	
221011 Printing, Stationery, Photocopying and Binding	2,822.000	
222002 Postage and Courier	300.000	
223001 Property Management Expenses	2,000.000	
223004 Guard and Security services	3,000.000	
223005 Electricity	2,250.000	
224002 Veterinary supplies and services	1,000.000	
224003 Agricultural Supplies and Services	4,113.000	
224011 Research Expenses	4,400.000	
226001 Insurances	200.000	
227004 Fuel, Lubricants and Oils	9,600.000	
228001 Maintenance-Buildings and Structures	6,265.000	
228002 Maintenance-Transport Equipment	7,500.000	
228003 Maintenance-Machinery & Equipment Other than Transport Equipment	3,000.000	
Total For Budget Output		58,400.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Wage Recurrent	0.000
	Non Wage Recurrent	58,400.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	58,400.000
	Wage Recurrent	0.000
	Non Wage Recurrent	58,400.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:007 NARO-SECRETARIATE		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed	Work initiated on the impact assessment study on sorghum (not groundnuts) and rice (not sunflower) technologies on the livelihoods and economy of Uganda generated. Tools were developed, Enumerators appointed and teams developed. NARO work plans FY 2023/2024 compiled and ready for printing. Two M&E report developed.	
NA		
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item	Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	68,104.500	
211107 Boards, Committees and Council Allowances	10,176.800	
221008 Information and Communication Technology Supplies.	2,608.500	
221009 Welfare and Entertainment	7,685.250	
221011 Printing, Stationery, Photocopying and Binding	13,116.000	
221012 Small Office Equipment	1,483.500	
222001 Information and Communication Technology Services.	17,730.250	
222002 Postage and Courier	125.176	
223001 Property Management Expenses	16,826.000	
223004 Guard and Security services	12,596.250	
223005 Electricity	16,626.000	
223006 Water	8,045.500	
224002 Veterinary supplies and services	9,420.500	
224003 Agricultural Supplies and Services	154,997.450	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
224004 Beddings, Clothing, Footwear and related Services		13,830.000
224011 Research Expenses		782,273.147
226001 Insurances		106.250
227001 Travel inland		9,155.000
227004 Fuel, Lubricants and Oils		75,743.300
228001 Maintenance-Buildings and Structures		147,582.929
228002 Maintenance-Transport Equipment		26,310.128
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		13,250.750
228004 Maintenance-Other Fixed Assets		2,647.700
	Total For Budget Output	1,410,440.880
	Wage Recurrent	0.000
	Non Wage Recurrent	1,410,440.880
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	1,410,440.880
	Wage Recurrent	0.000
	Non Wage Recurrent	1,410,440.880
	Arrears	0.000
	<i>AIA</i>	0.000
Department:008 National Agricultural Research Laboratories		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 Agriculture Research Innovations and IPs commercialized 1research products and services for food and nutrition security	One process trial conducted on bean products. 1 UNBS Audit for product certification (pumpkin/maize product) of incubatee (ECOFARM AGROPROCESSING LTD); 3 new incubatees (NUTRIWORTH LTD - millet based product, SEEDPRO AGROPROCESSING CO. LTD and GHA Production CO. LTD); Training of staff on bakery skills by S. Korea team of experts	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
221008 Information and Communication Technology Supplies.		6,000.000
221011 Printing, Stationery, Photocopying and Binding		9,800.000
222001 Information and Communication Technology Services.		3,250.000
223001 Property Management Expenses		4,450.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
223004 Guard and Security services		5,500.000
223005 Electricity		9,500.000
223006 Water		5,900.000
224003 Agricultural Supplies and Services		12,500.000
224011 Research Expenses		67,100.000
226001 Insurances		1,150.000
227004 Fuel, Lubricants and Oils		10,400.000
228002 Maintenance-Transport Equipment		5,450.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		9,000.000
	Total For Budget Output	150,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	150,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	150,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	150,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:009 National Coffee Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
NA	<p>Preference was given to 65 acres of coffee and cocoa maintained and 2400kg of kiboko coffee harvested from the fields.</p> <p>2 samples of coffee lotion and 2 samples of cream prepared and sent to UNBS for microbial and chemical testing</p> <p>Experiments for incidence and damage of coffee pests and diseases are ongoing.</p>	NA

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 0103020116 Functional public-private partnerships established for technology development and promotion		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi	<p>Initiated architectural designs for the establishment of wash-station to be utilised in quantification of cocoa waste.</p> <p>Experiment on water use efficiency was established and is on going, while experiments for incidence and damage of coffee pests and diseases are ongoing</p> <p>2 samples of coffee lotion and 2 samples of cream prepared and sent to UNBS for microbial and chemical testing Experiments for incidence and damage of coffee pests and diseases are ongoing</p>	
Expenditures incurred in the Quarter to deliver outputs		UShs Thousand
Item	Spent	
221007 Books, Periodicals & Newspapers	774.650	
221008 Information and Communication Technology Supplies.	2,372.364	
221009 Welfare and Entertainment	4,938.390	
221011 Printing, Stationery, Photocopying and Binding	2,202.910	
222002 Postage and Courier	484.156	
223001 Property Management Expenses	2,154.494	
223004 Guard and Security services	1,936.624	
223005 Electricity	2,178.702	
224003 Agricultural Supplies and Services	21,181.826	
224010 Protective Gear	1,694.546	
224011 Research Expenses	15,085.512	
227004 Fuel, Lubricants and Oils	25,297.150	
228001 Maintenance-Buildings and Structures	7,828.802	
228002 Maintenance-Transport Equipment	4,357.404	
228003 Maintenance-Machinery & Equipment Other than Transport Equipment	4,974.704	
228004 Maintenance-Other Fixed Assets	242.078	
273102 Incapacity, death benefits and funeral expenses	895.688	
	Total For Budget Output	98,600.000
	Wage Recurrent	0.000
	Non Wage Recurrent	98,600.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	98,600.000
	Wage Recurrent	0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Non Wage Recurrent	98,600.000
	Arrears	0.000
	<i>AIA</i>	0.000

Department:010 National Crops Resources Research Institute**Budget Output:010008 Capacity Strengthening****PIAP Output: 01040705 Demand driven agriculture technologies developed****Programme Intervention: 010407 Strengthen agricultural research and technology development**

2 market-oriented products generated 5 research products and services suitable for industry developed	Submitted 7 varieties (3 cassava, 2 sweetpotato and 2 ornage maize) Waiting for invitation from VRC to defend. Application for release of 6 bean varieties compiled. Variety release applications documents for two bean varieties submitted to MAAIF, NPT trials established for 5 promising lines and data collected. 2 National Performance Trial fields (NPT) was planted with (5 maize & 5 rice) test lines to generate data for final data for variety release We conducted evaluation of rice and palatability using TRICOT evaluation method for 6 test varieties. One hybrid rice variety WDR 73 was released in a sitting that took place in December 2022. 222 clones (160 cassava and 62 sweetpotato) establsihed under TRICOT, AYT, UYT, OFTS in NaCRRI, NaS222 clones (160 cassava and 62 sweetpotato clones) establsihed under TRICOT, AYT, UYT, OFTS in NaCRRI, NaSARRI, Kiige, NgeZARDI, BulZARDI, RweZARDI, Kigumba, Oyam, Arua and Terego
---	---

Expenditures incurred in the Quarter to deliver outputs		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		8,500.000
221008 Information and Communication Technology Supplies.		1,500.000
221011 Printing, Stationery, Photocopying and Binding		2,500.000
222001 Information and Communication Technology Services.		1,500.000
223004 Guard and Security services		3,500.000
223005 Electricity		14,900.000
224005 Laboratory supplies and services		1,500.000
224011 Research Expenses		23,210.000
227004 Fuel, Lubricants and Oils		4,000.000
228001 Maintenance-Buildings and Structures		2,500.000
228002 Maintenance-Transport Equipment		8,000.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		2,000.000
Total For Budget Output		73,610.000
Wage Recurrent		0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Non Wage Recurrent	73,610.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
3 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways.	Five biofortified bean varieties promoted 3 platforms being supported and operationalised Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported in the production of production and marketing of seed grain and bean derived products	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
3 Agriculture Research Innovations and IPs commercialized 3 public-private partnerships established for technology development and promotion 2Agricultural research platforms established 5 improved technologies and innovations adapted	Five biofortified bean varieties promoted. 3 agricultural research platforms being operationalised : i) Social media groups for TRICOT hosts & extension ii) Vine & Root producer association in Busoga Region; iii) Knowledge Hub on clean cassava seed system with Divine Organic Ltd 3 platforms being supported and operationalised Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported in the production of production and marketing of seed grain and bean derived products	
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
221009 Welfare and Entertainment		1,750.000
224003 Agricultural Supplies and Services		10,000.000
224011 Research Expenses		38,250.000
	Total For Budget Output	50,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	50,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	123,610.000
	Wage Recurrent	0.000
	Non Wage Recurrent	123,610.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Arrears	0.000
	AIA	0.000
Department:011 National Fisheries Resources Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained	(i) Incorporated fish species distribution maps for 287 fish species and corresponding shapefiles into the biodiversity portal. The distribution maps were built using the framework of the International Union for Conservation of Nature (IUCN) for mapping the distribution of freshwater species. Therefore, the maps and shapefiles show the origin (Native, Introduced, and Origin Uncertain) and presence (Extant, Possibly Extant, Possibly Extinct, and Presence Uncertain) of the species (ii) Incorporated into the portal, species summary pages for 16 newly described species (1ii) One fish laboratory maintained and operationalised. (iv) Institute premises and assets protected and kept secure. (v) 89 Staff motivated, capacity built and productivity enhanced. (vi) One administration facility maintained and operationalised. (vii) Institute fleet (1 Marine Vessel & 2 vehicles) maintained.	
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item	Spent	
221001 Advertising and Public Relations	3,773.280	
221007 Books, Periodicals & Newspapers	1,886.640	
221008 Information and Communication Technology Supplies.	1,572.200	
221009 Welfare and Entertainment	2,987.180	
221011 Printing, Stationery, Photocopying and Binding	2,672.740	
222001 Information and Communication Technology Services.	6,681.850	
223004 Guard and Security services	4,716.600	
223005 Electricity	3,930.500	
223006 Water	3,930.500	
224011 Research Expenses	20,124.360	
227004 Fuel, Lubricants and Oils	5,895.750	
228001 Maintenance-Buildings and Structures	11,948.720	
228002 Maintenance-Transport Equipment	3,930.500	
228003 Maintenance-Machinery & Equipment Other than Transport Equipment	4,449.180	
Total For Budget Output	78,500.000	
Wage Recurrent	0.000	
Non Wage Recurrent	78,500.000	
Arrears	0.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	<i>AIA</i>	0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained	One freshwater biodiversity portal for Uganda developed and maintained. Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained.	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers)	Initiated processes to acquire broodstock to produce fish fingerlings. 2 breeding cage facilities maintained and operationalized.	-
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
224003 Agricultural Supplies and Services		12,650.000
224011 Research Expenses		6,110.000
227004 Fuel, Lubricants and Oils		1,350.000
	Total For Budget Output	20,110.000
	Wage Recurrent	0.000
	Non Wage Recurrent	20,110.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	98,610.000
	Wage Recurrent	0.000
	Non Wage Recurrent	98,610.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:012 National Forestry Resources Research Institute		
Budget Output:010008 Capacity Strengthening		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled	Work still ongoing 30,000 high quality Hass Avocado Plantlets raised from clean roots stocks and scions .	work on trials, avocado storage and post-harvest equipment, oils and seed powder, innovation platforms not initiated due to lack of funds
Expenditures incurred in the Quarter to deliver outputs		US\$ Thousand
Item	Spent	
221009 Welfare and Entertainment	2,000.000	
221011 Printing, Stationery, Photocopying and Binding	2,200.000	
222001 Information and Communication Technology Services.	1,200.000	
222002 Postage and Courier	200.000	
223001 Property Management Expenses	4,000.000	
223004 Guard and Security services	4,968.000	
223005 Electricity	8,340.000	
224010 Protective Gear	362.000	
224011 Research Expenses	2,000.000	
227004 Fuel, Lubricants and Oils	6,000.000	
228001 Maintenance-Buildings and Structures	2,000.000	
228002 Maintenance-Transport Equipment	4,000.000	
228004 Maintenance-Other Fixed Assets	2,000.000	
	Total For Budget Output	39,270.000
	Wage Recurrent	0.000
	Non Wage Recurrent	39,270.000
	Arrears	0.000
	AIA	0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 Shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding	4 Shea ethno-varieties in 2 Breeding Seed Orchards conserved and managed..	Not monitored due to lack of funds. work on annona not initiated due to lack of funds

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter		Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
27500 Hass Avocado seedlings produced and extended to famers.	Hass avocado gene bank partially maintained and avocado seedlings not produced due to limited funding	Hass avocado gene bank partially maintained and avocado seedlings not produced due to limited funding	
NA	Hass avocado gene bank partially maintained and avocado seedlings not produced due to limited funding	Hass avocado gene bank partially maintained and avocado seedlings not produced due to limited funding	
Expenditures incurred in the Quarter to deliver outputs			US\$ Thousand
Item			Spent
221001 Advertising and Public Relations			2,164.958
221007 Books, Periodicals & Newspapers			649.488
222001 Information and Communication Technology Services.			4,329.916
224011 Research Expenses			16,085.638
Total For Budget Output			23,230.000
Wage Recurrent			0.000
Non Wage Recurrent			23,230.000
Arrears			0.000
AIA			0.000
Total For Department			62,500.000
Wage Recurrent			0.000
Non Wage Recurrent			62,500.000
Arrears			0.000
AIA			0.000
Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)			
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
2 Value added products of tomato and pineapple developed and promoted	Work still on-going on two Value added products of tomato and pineapple .		
Expenditures incurred in the Quarter to deliver outputs			US\$ Thousand
Item			Spent
221011 Printing, Stationery, Photocopying and Binding			3,750.000
222001 Information and Communication Technology Services.			2,316.000
223004 Guard and Security services			12,000.000
223005 Electricity			10,500.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
223006 Water		1,700.000
224011 Research Expenses		17,268.000
227004 Fuel, Lubricants and Oils		3,150.000
	Total For Budget Output	50,684.000
	Wage Recurrent	0.000
	Non Wage Recurrent	50,684.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced	Two technology demonstration and mother gardens maintained for producing seedlings of coffee and cocoa.. Seedlings produced and distributed to farmers 500 for coffee and 100 for cocoa.	Limited funds for the undertaking.
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
221001 Advertising and Public Relations		3,750.000
221009 Welfare and Entertainment		1,200.000
222001 Information and Communication Technology Services.		5,297.000
223001 Property Management Expenses		5,186.000
224011 Research Expenses		43,782.000
226001 Insurances		1,000.000
228001 Maintenance-Buildings and Structures		6,750.000
228002 Maintenance-Transport Equipment		6,801.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		3,500.000
228004 Maintenance-Other Fixed Assets		1,000.000
273102 Incapacity, death benefits and funeral expenses		3,000.000
	Total For Budget Output	81,266.000
	Wage Recurrent	0.000
	Non Wage Recurrent	81,266.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	131,950.000
	Wage Recurrent	0.000
	Non Wage Recurrent	131,950.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Arrears	0.000
	AIA	0.000
Department:014 National Livestock Resources Research Institute (NaLIRRI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
50 MT of conserved feed resources produced 50 Inbred line with different genetic back ground assembled 50 Samples for genotyping collected & processed	<p>Conserved 80 tonnes of Napier silage, three months database on milk qualities, foot health and calf body weight gain.</p> <p>Conserved 80 tonnes of Napier silage, 200 tonnes"</p> <p>Database for agronomic & nutritional /sugar biochemical developed;</p> <p>Periodic quality assessment of ensiled through laboratory silos.</p> <p>Dry Matter and sugar content of atleast 50 inbredlines determined.</p>	
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item	Spent	
221003 Staff Training	10,000.000	
221008 Information and Communication Technology Supplies.	15,850.000	
221009 Welfare and Entertainment	6,248.000	
221011 Printing, Stationery, Photocopying and Binding	3,626.000	
221012 Small Office Equipment	10,746.000	
221017 Membership dues and Subscription fees.	11,014.000	
222002 Postage and Courier	5,724.000	
223001 Property Management Expenses	6,500.000	
223002 Property Rates	2,249.000	
223004 Guard and Security services	20,000.000	
223005 Electricity	20,000.000	
223006 Water	5,000.000	
224001 Medical Supplies and Services	17,445.000	
224002 Veterinary supplies and services	5,000.000	
224003 Agricultural Supplies and Services	36,250.000	
224004 Beddings, Clothing, Footwear and related Services	16,500.000	
224005 Laboratory supplies and services	8,000.000	
224011 Research Expenses	45,903.000	
225101 Consultancy Services	1,500.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
226002 Licenses		3,500.000
227001 Travel inland		2,500.000
227004 Fuel, Lubricants and Oils		1,000.000
228001 Maintenance-Buildings and Structures		21,250.000
228002 Maintenance-Transport Equipment		15,750.000
228004 Maintenance-Other Fixed Assets		10,000.000
	Total For Budget Output	301,555.000
	Wage Recurrent	0.000
	Non Wage Recurrent	301,555.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	301,555.000
	Wage Recurrent	0.000
	Non Wage Recurrent	301,555.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:015 National Semi Arid Resources Research Institute (NaSARRI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,	Data recording on cotton varieties at the infested fields and in the screen house for wilts and bacterial blight diseases .	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
224003 Agricultural Supplies and Services		1,665.000
224011 Research Expenses		7,770.000
227004 Fuel, Lubricants and Oils		1,110.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		565.000
	Total For Budget Output	11,110.000
	Wage Recurrent	0.000
	Non Wage Recurrent	11,110.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Arrears	0.000
	AIA	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Generation Seed (EGS) produced to promote uptake of 4 technologies. through private sector. Technologies for food, nutrition and Industry promoted in 1 District located 1 Argo ecological zones	1.5 acres of NAROGRAM2 seed production fields well maintained. 6 sorghum candidate lines for malting, fodder and grain yield submitted for release. 108 lines under evaluation for grain quality (54), and striga (54), 7 acres of seed multiplication field/demos established in Masindi, Ikulwe, and Amuria.	
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item	Spent	
221001 Advertising and Public Relations	1,500.000	
221007 Books, Periodicals & Newspapers	2,500.000	
221008 Information and Communication Technology Supplies.	5,500.000	
221009 Welfare and Entertainment	2,500.000	
221011 Printing, Stationery, Photocopying and Binding	1,500.000	
222001 Information and Communication Technology Services.	1,000.000	
223001 Property Management Expenses	2,000.000	
223004 Guard and Security services	4,800.000	
223005 Electricity	7,200.000	
223006 Water	2,000.000	
224011 Research Expenses	11,000.000	
226001 Insurances	500.000	
227004 Fuel, Lubricants and Oils	3,000.000	
228002 Maintenance-Transport Equipment	3,000.000	
273102 Incapacity, death benefits and funeral expenses	2,000.000	
	Total For Budget Output	50,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	50,000.000
	Arrears	0.000
	AIA	0.000
	Total For Department	61,110.000
	Wage Recurrent	0.000
	Non Wage Recurrent	61,110.000
	Arrears	0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	<i>AIA</i>	0.000
Department:016 Ngetta ZARDI		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 New multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed 3 acre	Trial established 2 acres groundnut , 2 acres of bean and 2 acres of of soya bean harvested and post harvest processing conducted to disseminate farming community.	
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
212103 Incapacity benefits (Employees)		6,000.000
221011 Printing, Stationery, Photocopying and Binding		1,000.000
223006 Water		3,500.000
224003 Agricultural Supplies and Services		8,000.000
224011 Research Expenses		32,340.000
228001 Maintenance-Buildings and Structures		2,500.000
228002 Maintenance-Transport Equipment		2,500.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		2,500.000
	Total For Budget Output	58,340.000
	Wage Recurrent	0.000
	Non Wage Recurrent	58,340.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	58,340.000
	Wage Recurrent	0.000
	Non Wage Recurrent	58,340.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:017 Rwebitaba ZARDI		
Budget Output:010010 Technology Generation		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
10,000 clonal plantlets of selected tea clones multiplied. 5 tea clones characterized for biochemical attributes ,2500 open pollinated hybrid tea seeds collected	4,000 clonal plantlets of selected tea clones multiplied. 94 Tea accessions genotyped using DART technology for diversity and genomic selection purposes. Data sets on individual selection basing on (Yield, recovery from prune, drought)	Activities scaled down due to limited funds
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item	Spent	
221003 Staff Training	2,830.966	
221007 Books, Periodicals & Newspapers	1,415.484	
221008 Information and Communication Technology Supplies.	2,642.236	
221009 Welfare and Entertainment	2,359.138	
221011 Printing, Stationery, Photocopying and Binding	2,830.966	
222001 Information and Communication Technology Services.	4,623.912	
223001 Property Management Expenses	5,190.104	
223004 Guard and Security services	4,152.084	
223005 Electricity	2,830.966	
223006 Water	5,661.832	
224003 Agricultural Supplies and Services	5,614.750	
224004 Beddings, Clothing, Footwear and related Services	1,887.310	
224011 Research Expenses	31,246.788	
226001 Insurances	566.194	
227004 Fuel, Lubricants and Oils	8,021.070	
228001 Maintenance-Buildings and Structures	2,359.138	
228002 Maintenance-Transport Equipment	7,549.244	
228004 Maintenance-Other Fixed Assets	3,019.698	
Total For Budget Output	94,801.880	
Wage Recurrent	0.000	
Non Wage Recurrent	94,801.880	
Arrears	0.000	
<i>AIA</i>	0.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Total For Department	94,801.880
	Wage Recurrent	0.000
	Non Wage Recurrent	94,801.880
	Arrears	0.000
	<i>AIA</i>	0.000

*Development Projects***Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)****Budget Output:000017 Infrastructure Development and Management****PIAP Output: 01040705 Demand driven agriculture technologies developed****Programme Intervention: 010407 Strengthen agricultural research and technology development**

1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	1) Substructure of queen rearing facility and Goat research facility constructed; 3) Construction of Calf/heifer barn at Nakyesasa completed 4) Super-structure of residential staff quarters constructed; 5) Research bull-stud at Nakyesasa at 80% completion. 6) Other works still on-going.	-
1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	1) Development of water supply and distribution system at Maruzi completed, 2) Construction of Maruzi access roads completed; 3) Milking and milking processing platform at Nakyesasa operationalized, 4) Water supply and distribution system developed at Maruzi, 5) Substructure of residential staff quarters constructed;	-

Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
	Total For Budget Output	249,573.124
	GoU Development	249,573.124
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000

Budget Output:010010 Technology Generation**PIAP Output: 01040705 Demand driven agriculture technologies developed****Programme Intervention: 010407 Strengthen agricultural research and technology development**

1MT ton of forage seed produced, 1 high yielding brachiria developed,1 low-cost pig feeding packages based on forages and animal waste developed, 2 forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 of Jersey crosses	1) 2 tons of Chloris seed (100 acres) harvested; 2) 7.5tons of dairy feed supplement (20 acres) produced;	
---	---	--

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 Community Constraint Diagnostic Study Conducted	NA	NA
NA	1) 20 acres bush cleared for bee forage production fields established. 2) 2 tons of Chloris seed (100 acres) harvested; 3) 7.5tons of dairy feed supplement (20 acres) produced;	Continued from Q1.
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
	Total For Budget Output	881,508.968
	GoU Development	881,508.968
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Project	1,131,082.092
	GoU Development	1,131,082.092
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000
Project:1619 Retooling of National Agricultural Research Organization		
Budget Output:000003 Facilities and Equipment Management		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
NA	4 research laboratories equipped and supplied with consumables to support research. Four research laboratories maintained The process has been initiated to accredit of five research laboratories	Limited funds available for a very tedious resource demanding exercise.
Four Agricultural research laboratories of strategic importance equipped 16 Public Agricultural research Institutes retooled with transport equipment & machinery for products 8 Public Agricultural research Institutes retooled with computers	Procurement process initiated for transport equipment and computers in anticipation of adequate funds in quarter three.	Limited funds to undertake this activity
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
	Total For Budget Output	0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Project:1619 Retooling of National Agricultural Research Organization		
	GoU Development	0.000
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of 1 National laboratories. 2 titles acquired for research land	Staff facilitated to attend long-term and short term skills improvement programmes (tuition fees payment for 4 PhD students, 2 Masters and 6 staff facilitated to attend a short term skills enhancement training). Subscription paid for 2 Engineers, 3 ICPAU members, 1 ICSA member, and 1 member of Uganda Law Society and E.African Law Society	-
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
224011 Research Expenses		1,820,525.500
227004 Fuel, Lubricants and Oils		49,796.400
	Total For Budget Output	2,334,296.058
	GoU Development	2,334,296.058
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010009 Research Partnerships		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
NNARO annual subscription to 1 international research organizations maintained	Postponed as to when funds available and adequate	Postponed when funds available and adequate.
Expenditures incurred in the Quarter to deliver outputs		<i>UShs Thousand</i>
Item		Spent
	Total For Budget Output	599,867.691
	GoU Development	599,867.691
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010010 Technology Generation		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Project:1619 Retooling of National Agricultural Research Organization		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
8 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 3 of research products and services suitable for food Nutrition and industry developed	8 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. Work is still on-going. 3 of research products and services suitable for food Nutrition and industry developed. These include 5 new varieties (3-cassava & 2 sweet potato) submitted to Variety release committee; 10 National Performance Trial (NPT) for cassava established	Not all CGS projects were funded since the funds were not adequate.
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
224003 Agricultural Supplies and Services		976,740.000
224011 Research Expenses		2,048,060.000
	Total For Budget Output	1,157,017.205
	GoU Development	1,157,017.205
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 agricultural research innovations and IPs commercialized, 1multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-Private Partnerships established for for technology development and promotion	3 multi-stakeholders agricultural research innovation platforms established. 7 climate-smart technologies demonstrations established in the ZARDIs 6 Public-Private Partnerships established for for technology development and promotion.	-
Expenditures incurred in the Quarter to deliver outputs		<i>US\$ Thousand</i>
Item		Spent
224003 Agricultural Supplies and Services		459,000.000
224011 Research Expenses		1,147,500.000
	Total For Budget Output	560,249.663
	GoU Development	560,249.663
	External Financing	0.000
	Arrears	0.000
	<i>AIA</i>	0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Total For Project	4,651,430.617
	GoU Development	4,651,430.617
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
	GRAND TOTAL	22,812,457.457
	Wage Recurrent	10,199,777.318
	Non Wage Recurrent	6,830,167.430
	GoU Development	5,782,512.709
	External Financing	0.000
	Arrears	0.000
	AIA	0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Quarter 2: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Programme:01 Agro-Industrialization		
SubProgramme:01 Institutional Strengthening and Coordination		
Sub SubProgramme:01 Agricultural Research		
<i>Departments</i>		
Department:007 NARO-SECRETARIATE		
Budget Output:000001 Audit and Risk Management		
PIAP Output: 01040701 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
11 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research.		4 audit staff attained skills and techniques in auditing in dynamic environment and update knowledge on emerging trends in the Accountancy profession. 12 audit staff attained skills and techniques in auditing in a dynamic environment and emerging trends in the Accountancy profession, and the role of timely reporting to audit. One audit report produced on the performance of NHL in generating revenue to supplement research funding. 8 Audit Staff at PARIs backed stopped at ABI ZARDI, NaLIRRI, BugiZARDI, BULINDI, NARL, NaCRRRI, MUZARDI, NaFIRRI and NaCORI. One audit report on special assignment produced on a feed the future and sweet gains projects. One audit report on the status of implementing audit recommendations for FY2021/2022 produced by PARI Internal audit staff. Produce 1 report advising on the effective management of governance, social and environmental issues. Risk Management reviews and risk mitigation meetings held at NaCRRRI. One audit report on the status of implementing aud
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		<i>UShs Thousand</i>
Item		Spent
221003 Staff Training		12,143.360
224011 Research Expenses		42,746.500
	Total For Budget Output	54,889.860
	Wage Recurrent	0.000
	Non Wage Recurrent	54,889.860
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:000014 Administrative and Support Services		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040701 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Annual subscription for insurance of research vessels, machinery and equipment maintained.	2 Public-Private Partnerships established for technology	
6Public-Private Partnerships established for technology	1 research support infrastructure establishment supported	
16 research support infrastructure establishment supported	1 Governing council sessions supported	
8 Governing council sessions supported	Medical insurance for 824 staff paid to IML.	
	Payment of Staff Gratuity for the quarter.	
	Staff facilitated with monthly welfare and daily transport.	
	Supported staff who lost their parents.	
	Consultative meetings with NARO staff both at NAROSEC and the 16 PARIS.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
211102 Contract Staff Salaries		19,902,554.636
211104 Employee Gratuity		4,851,388.660
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)		303,225.900
212101 Social Security Contributions		1,940,555.418
212102 Medical expenses (Employees)		648,260.000
212103 Incapacity benefits (Employees)		157,490.757
221009 Welfare and Entertainment		45,530.001
	Total For Budget Output	27,849,005.372
	Wage Recurrent	19,902,554.636
	Non Wage Recurrent	7,946,450.736
	Arrears	0.000
	AIA	0.000
	Total For Department	27,903,895.232
	Wage Recurrent	19,902,554.636
	Non Wage Recurrent	8,001,340.596
	Arrears	0.000
	AIA	0.000
<i>Development Projects</i>		
N/A		
SubProgramme:02 Agricultural Production and Productivity		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
Sub SubProgramme:01 Agricultural Research			
Departments			
Department:001 Abi Zonal Agriculture Research Institute(ZARDI)			
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
13 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 56,000 seedlings of (10,000) Mango, five thousand (5,000) Citrus, Ten thousand (10,000) Avocado		3 Research-extension farmer linkages developed and strengthened. Two MSIPS and one farmer training conducted. 2 newly released root crop varieties introduced to uptake pathways in the west Nile region. 2500 seedlings of (1250) Mango, five thousand (500) Citrus, Ten thousand (1250) Avocado.	
Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product		Germplasm assembled for Tamarind, Shear, Rubber vine and Combratum. Fish At least 20 specimen samples of digestive systems of Hydrocynusvittatus (Castelnau, 1861) (Tiger fish) collected from Lake Albert and submitted to Makerere University Lab for histomorphology description analysis. Cereals one cereal gene bank established for godo sorghum	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product		NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand	
Item		Spent	
224011 Research Expenses		27,510.000	
Total For Budget Output		27,510.000	
Wage Recurrent		0.000	
Non Wage Recurrent		27,510.000	
Arrears		0.000	
AIA		0.000	
Budget Output:010011 Technology Promotion			

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Two functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 2 selected commodities of sorghum and goats in West Nile region		One functional public private partnerships and one platforms established for promotion of Fish and Cassava products and services. Seven Nursery and four growth-out ponds constructed.	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Forty-five thousand high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted Two climate resilient and farmer preffered dry land legumes varieties 6 newly released root crop varieties promoted		One functional screen house maintained for on station for production of seedlings. 11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer prefered dry land legume variety 1 newly released root crop variety promoted	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs			UShs Thousand
Item			Spent
221008 Information and Communication Technology Supplies.			375.000
221011 Printing, Stationery, Photocopying and Binding			10,177.500
222001 Information and Communication Technology Services.			281.250
224003 Agricultural Supplies and Services			15,000.000
224011 Research Expenses			30,090.000
227004 Fuel, Lubricants and Oils			4,076.250
Total For Budget Output			60,000.000
Wage Recurrent			0.000
Non Wage Recurrent			60,000.000
Arrears			0.000
AIA			0.000
Total For Department			87,510.000
Wage Recurrent			0.000
Non Wage Recurrent			87,510.000
Arrears			0.000
AIA			0.000
Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI)			
Budget Output:010008 Capacity Strengthening			

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 partnerships promoted for technology generation 2 research products commercialized 3 research platforms established	<p>Data collection on NARO technology adoption in 6 districts of Bukedi sub zone collected . Data cleaning, coding and entry. Work still on-going.</p> <p>2 Aquaculture related partnerships initiated and farmer relations strengthened in the zone</p> <p>3 commodity based partnerships (Bushikan Intergrated Area Cooperative Enterprises Ltd, Bukhoko Dubaana, Buginyanya Upland Company Ltd and Ibero Uganda in Bududa, Namisidwa and Bulambuli districts respectively initiated along the commodity value chain (Arabica coffee)</p> <p>2 partnerships in Dairy management and Wheat/barley enhanced.</p> <p>Four partnerships promoted in the areas of technology development, improved seed uptake and related innovations and other value chain developments. These include: PRiDe, WLF, World Vision, EADEN.</p>	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item	Spent	
211107 Boards, Committees and Council Allowances	4,305.000	
212103 Incapacity benefits (Employees)	1,323.000	
221001 Advertising and Public Relations	3,912.000	
221007 Books, Periodicals & Newspapers	1,017.000	
221008 Information and Communication Technology Supplies.	4,695.000	
221009 Welfare and Entertainment	900.000	
221011 Printing, Stationery, Photocopying and Binding	3,954.000	
221012 Small Office Equipment	1,566.000	
222001 Information and Communication Technology Services.	16,827.000	
223001 Property Management Expenses	2,346.000	
223004 Guard and Security services	9,783.000	
223005 Electricity	3,132.000	
223006 Water	2,349.000	
224011 Research Expenses	13,698.000	
226001 Insurances	390.000	
227004 Fuel, Lubricants and Oils	3,915.000	
228001 Maintenance-Buildings and Structures	1,956.000	
228002 Maintenance-Transport Equipment	15,900.000	
228003 Maintenance-Machinery & Equipment Other than Transport	3,915.000	
228004 Maintenance-Other Fixed Assets	1,956.000	
Total For Budget Output	97,839.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
	Wage Recurrent		0.000
	Non Wage Recurrent		97,839.000
	Arrears		0.000
	<i>AIA</i>		0.000
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Four (4) Industrial products for yield improvement and commercialization developed for industry	soils One NPK fertilizer blend suitable for coffee under trial, first season data collected. coffee Preliminary results showed an increase in number of berries on bearing nodes, which likely implies increase in yield, more data will be collected in the season.		
Two varieties with adequate resistance to major pests and diseases developed to support house food security and incomes Two packages for sustainable disease management in Arabica coffee and potato developed	Working still on-going on two varieties potato and arabic coffee with adequate resistance to major pests and diseases developed to support house food security and incomes. Working still on-going on two packages for sustainable disease management in Arabica coffee and potato developed.		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
2 pests resistant varieties 2 disease management packages for strategic crops Generate 25 tons of potato seed 15 adaptive trials, demos 4 Industrial products for yield improvement developed 4 scientific papers published	Work still on going for pests resistant varieties and disease management packages for coffee and potato. 5 adaptive trials, and 4 demos for yield improvement . Two scientific paper published.		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs			<i>UShs Thousand</i>
Item			Spent
221011 Printing, Stationery, Photocopying and Binding			2,325.750
221012 Small Office Equipment			802.500
224002 Veterinary supplies and services			750.000
224003 Agricultural Supplies and Services			6,450.000
224011 Research Expenses			6,900.000
227004 Fuel, Lubricants and Oils			2,700.000
228002 Maintenance-Transport Equipment			900.000
	Total For Budget Output		20,828.250
	Wage Recurrent		0.000
	Non Wage Recurrent		20,828.250
	Arrears		0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
AIA		0.000	
Budget Output:010011 Technology Promotion			
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes		Four these papers though accepted have not been published.	
15 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies		4 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies	
PIAP Output: 0103020112 Agricultural Research platforms established			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted		3 commodity based partnerships (Bushikan Intergrated Area Cooperative Enterprises Ltd, Bukhoko Dubaana, Buginyanya Upland Company Ltd and Ibero Uganda in Bududa, Namisidwa and Bulambuli districts respectively initiated along the commodity value chain (Arabica coffee)	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand	
Item		Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)		6,522.000	
211107 Boards, Committees and Council Allowances		2,871.000	
212103 Incapacity benefits (Employees)		1,044.000	
221001 Advertising and Public Relations		2,610.000	
221007 Books, Periodicals & Newspapers		678.000	
221008 Information and Communication Technology Supplies.		3,132.000	
221009 Welfare and Entertainment		600.000	
221011 Printing, Stationery, Photocopying and Binding		4,065.000	
221012 Small Office Equipment		1,044.000	
222001 Information and Communication Technology Services.		11,220.000	
223001 Property Management Expenses		1,563.000	
223004 Guard and Security services		6,519.000	
223005 Electricity		2,088.000	
223006 Water		1,563.000	
224002 Veterinary supplies and services		2,094.750	
224003 Agricultural Supplies and Services		4,239.000	
224011 Research Expenses		11,055.000	
226001 Insurances		261.000	
227004 Fuel, Lubricants and Oils		2,610.000	
228001 Maintenance-Buildings and Structures		1,305.000	
228002 Maintenance-Transport Equipment		10,437.000	
228003 Maintenance-Machinery & Equipment Other than Transport		2,610.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
228004 Maintenance-Other Fixed Assets		1,302.000
	Total For Budget Output	81,432.750
	Wage Recurrent	0.000
	Non Wage Recurrent	81,432.750
	Arrears	0.000
	AIA	0.000
	Total For Department	200,100.000
	Wage Recurrent	0.000
	Non Wage Recurrent	200,100.000
	Arrears	0.000
	AIA	0.000
Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 MSIPs (Soybean and Rice) Initiated to promote technologies 5 crop, 3 livestock and 2 post-harvest handling technologies & practices promoted 5 Climate smart agricultural technologies demonstrated	Work initiated one soybean msip. 300 Students, 50 farmers and 65 stakeholders (extension workers, district/town councils) , have visited the institute and exposed to crop and livestock technologies. 3 acre demos established in sites in 3 districts. Of rice variety NERICA4 Musomesa field school in Kigorobya - Hoima, Mabaale - Kagadi, and Kabwoya - Kikuube. Each site with 32 participants.	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed	Foundation seed was sourced from NHL for beans, Uganda prison services for UH 5051 hybrid maize and SoyAfrica Makerere University for Soy beans. Total acreage planted 157 of four bean varieties, two soya and one maize variety.	
Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed	0.75 acres of seed multiplication fields opened for maize. Developed the protocol and data collection tool to generate information on preferred bee floral resources. Acquired five pollen collecting traps for collection of pollen samples from 5 apiaries (on-station and 4 on-farm	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		5,361.429

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221007 Books, Periodicals & Newspapers		1,787.142
221008 Information and Communication Technology Supplies.		4,467.858
221009 Welfare and Entertainment		5,361.429
221011 Printing, Stationery, Photocopying and Binding		5,361.429
221012 Small Office Equipment		2,680.713
221017 Membership dues and Subscription fees.		1,787.142
222002 Postage and Courier		893.571
223001 Property Management Expenses		3,574.287
223004 Guard and Security services		8,935.713
224010 Protective Gear		1,787.142
224011 Research Expenses		57,882.856
228002 Maintenance-Transport Equipment		8,935.713
228003 Maintenance-Machinery & Equipment Other than Transport		7,148.571
273102 Incapacity, death benefits and funeral expenses		2,680.719
	Total For Budget Output	118,645.714
	Wage Recurrent	0.000
	Non Wage Recurrent	118,645.714
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	118,645.714
	Wage Recurrent	0.000
	Non Wage Recurrent	118,645.714
	Arrears	0.000
	<i>AIA</i>	0.000
Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Six technologies promoted for food, nutrition and industry Two technologies for food and nutrition security generated	One new potato variety NAROPOT 6 released. It is resistant to late blight and are good for processing into chips and crisps. NAROPOT 5 promoted good for processing into chips and crisps.	
8 Demand driven agriculture technologies developed and promoted for food and nutrition security; and industry	Two Improved bean varieties have planted in Kihhi Kanungu. 3 new improved upland rice varieties generated by NaCRRI were targeted not achieved but land for planting the demos has been cleared.	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
8 Demand driven agriculture technologies developed and promoted for food and nutrition; and industry	One new potato variety NAROPOT 6 released. It is resistant to late blight and are good for processing into chips and crisps.	
	NAROPOT 5 promoted good for processing into chips and crisps.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item	Spent	
211107 Boards, Committees and Council Allowances	1,200.000	
221008 Information and Communication Technology Supplies.	6,000.000	
221009 Welfare and Entertainment	5,400.000	
221012 Small Office Equipment	1,050.000	
222001 Information and Communication Technology Services.	600.000	
223001 Property Management Expenses	6,300.000	
223004 Guard and Security services	30,237.000	
223005 Electricity	2,400.000	
223006 Water	2,250.000	
224003 Agricultural Supplies and Services	18,006.000	
224011 Research Expenses	35,230.800	
226001 Insurances	877.500	
227004 Fuel, Lubricants and Oils	12,094.200	
228001 Maintenance-Buildings and Structures	15,004.500	
228002 Maintenance-Transport Equipment	7,200.000	
	Total For Budget Output	143,850.000
	Wage Recurrent	0.000
	Non Wage Recurrent	143,850.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	143,850.000
	Wage Recurrent	0.000
	Non Wage Recurrent	143,850.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010008 Capacity Strengthening		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Five technologies for food, nutrition and industry promoted in ten districts of the Zone	One technology (feed supplement) was generated and promoted for the dairy industry promoted in mbarara district.	
Two technologies generated for market and Industry	Improved banana varieties were demonstrated on station.	
6 Research facilities maintained to support research	Hosted the launch of anti-tick vaccine on station..	
	Dairy facilities maintained to support research	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
224002 Veterinary supplies and services		11,250.000
224003 Agricultural Supplies and Services		7,500.000
224011 Research Expenses		68,850.000
	Total For Budget Output	87,600.000
	Wage Recurrent	0.000
	Non Wage Recurrent	87,600.000
	Arrears	0.000
	AIA	0.000
	Total For Department	87,600.000
	Wage Recurrent	0.000
	Non Wage Recurrent	87,600.000
	Arrears	0.000
	AIA	0.000
Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Seven (07) technologies for food, Nutrition, income & industry promoted in the zone	Two improved maize varieties for food promoted in the zone.	
Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined.	One Maize strategy for control of FAW & desert locusts demonstrated	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Seven (07) technologies for food, Nutrition, income & industry promoted in the zone	Two technologies for livestock industry promoted in the zone , Managing broccellosis and bracharia mulato for feed.	
Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined.	Two biological control strategies on FAW & desert locusts demonstrated determined	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers	50 kgs of seed of adapted maize and one pulse (jack bean)) varieties were adapted, produced and availed to farmers, in Karamoja zone.	
4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers	50 kgs of seed of Maize -Hybrid (UH5051 certified) maize and one pulse varieties (jack bean)) were produced and availed to farmers, in Karamoja zone.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	10,125.000	
211107 Boards, Committees and Council Allowances	3,750.000	
212103 Incapacity benefits (Employees)	1,125.000	
221001 Advertising and Public Relations	1,500.000	
221009 Welfare and Entertainment	1,425.000	
221011 Printing, Stationery, Photocopying and Binding	4,233.000	
222002 Postage and Courier	450.000	
223001 Property Management Expenses	3,000.000	
223004 Guard and Security services	4,500.000	
223005 Electricity	3,375.000	
224002 Veterinary supplies and services	1,500.000	
224003 Agricultural Supplies and Services	6,169.500	
224011 Research Expenses	6,600.000	
226001 Insurances	300.000	
227004 Fuel, Lubricants and Oils	14,400.000	
228001 Maintenance-Buildings and Structures	9,397.500	
228002 Maintenance-Transport Equipment	11,250.000	
228003 Maintenance-Machinery & Equipment Other than Transport	4,500.000	
	Total For Budget Output	87,600.000
	Wage Recurrent	0.000
	Non Wage Recurrent	87,600.000
	Arrears	0.000
	AIA	0.000
	Total For Department	87,600.000
	Wage Recurrent	0.000
	Non Wage Recurrent	87,600.000
	Arrears	0.000
	AIA	0.000
Department:007 NARO-SECRETARIATE		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Budget Output: 010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed,	Work initiated on the impact assessment study on sorghum (not groundnuts) and rice (not sunflower) technologies on the livelihoods and economy of Uganda generated. Tools were developed, Enumerators appointed and teams developed. 1 Impact report on maize and bean technologies finalized and published NARO work plans FY 2023/2024 compiled. Two M&E report developed.	
1 biosecurity access point for the vaccine research facility diverted and maintained as per guidance from from National Council of science and technology for National Bio safety committee, PANVAC and global acceptability for commercialization.		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		<i>UShs Thousand</i>
Item	Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	131,882.000	
211107 Boards, Committees and Council Allowances	20,470.800	
221007 Books, Periodicals & Newspapers	1,743.000	
221008 Information and Communication Technology Supplies.	5,217.000	
221009 Welfare and Entertainment	15,370.500	
221011 Printing, Stationery, Photocopying and Binding	17,051.000	
221012 Small Office Equipment	2,967.000	
222001 Information and Communication Technology Services.	29,065.500	
222002 Postage and Courier	735.176	
223001 Property Management Expenses	28,276.000	
223004 Guard and Security services	24,002.500	
223005 Electricity	25,986.250	
223006 Water	12,438.000	
224002 Veterinary supplies and services	18,841.000	
224003 Agricultural Supplies and Services	209,670.700	
224004 Beddings, Clothing, Footwear and related Services	13,830.000	
224011 Research Expenses	1,537,551.204	
226001 Insurances	212.500	
227001 Travel inland	17,961.500	
227004 Fuel, Lubricants and Oils	131,903.250	
228001 Maintenance-Buildings and Structures	180,043.679	
228002 Maintenance-Transport Equipment	52,809.688	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
228003 Maintenance-Machinery & Equipment Other than Transport		22,596.250
228004 Maintenance-Other Fixed Assets		3,813.949
352882 Utility Arrears Budgeting		143,762.518
	Total For Budget Output	2,648,200.964
	Wage Recurrent	0.000
	Non Wage Recurrent	2,504,438.446
	Arrears	143,762.518
	AIA	0.000
	Total For Department	2,648,200.964
	Wage Recurrent	0.000
	Non Wage Recurrent	2,504,438.446
	Arrears	143,762.518
	AIA	0.000
Department:008 National Agricultural Research Laboratories		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize	Nutrient profiles of bean products/100g of food sample (Total Carbohydrates-20.4g, Proteins-7.6g, Total Fat-0.5g, Fiber-7.5g) Functional properties of bean (Water absorption Capacity, Solubility Index, %Solubility). Atleast one process trial conducted on bean products. 1 UNBS Audit for product certification (pumpkin/maize product) of incubatee (ECOFARM AGROPROCESSING LTD); 3 new incubatees (NUTRIWORTH LTD - millet based product, SEEDPRO AGROPROCESSING CO. LTD and GHA Production CO. LTD); Training of staff on bakery skills by S. Korea team of experts	
5 Agriculture Research Innovations and IPs commercialized		
4 research products and services for food and nutrition s		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221008 Information and Communication Technology Supplies.		9,000.000
221011 Printing, Stationery, Photocopying and Binding		14,700.000
222001 Information and Communication Technology Services.		4,875.000
223001 Property Management Expenses		6,675.000
223004 Guard and Security services		8,250.000
223005 Electricity		14,250.000
223006 Water		8,850.000
224003 Agricultural Supplies and Services		18,750.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
224011 Research Expenses		100,650.000
226001 Insurances		1,725.000
227004 Fuel, Lubricants and Oils		15,600.000
228002 Maintenance-Transport Equipment		8,175.000
228003 Maintenance-Machinery & Equipment Other than Transport		13,500.000
	Total For Budget Output	225,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	225,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	225,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	225,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:009 National Coffee Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refi	Preference was given to 65 acres of coffee and cocoa maintained and2400kg of kiboko coffee harvested from the fields 2 samples of coffee lotion and 2 samples of cream prepared and sent toUNBS for microbial and chemical testing Experiments for incidence and damage of coffee pests and diseases are ongoing.	
PIAP Output: 0103020116 Functional public-private partnerships established for technology development and promotion		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refine	Initiated architectural designs for the establishment of wash-station to be utilised in quantification of cocoa waste. Experiment on water use efficiency was established and is on going, while experiments for incidence and damage of coffee pests and diseases are ongoing 2 samples of coffee lotion and 2 samples of cream prepared and sent to UNBS for microbial and chemical testing	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221007 Books, Periodicals & Newspapers		1,161.975
221008 Information and Communication Technology Supplies.		3,558.546
221009 Welfare and Entertainment		7,407.585
221011 Printing, Stationery, Photocopying and Binding		3,304.365
222002 Postage and Courier		726.234
223001 Property Management Expenses		3,231.741
223004 Guard and Security services		2,904.936
223005 Electricity		3,268.053
224003 Agricultural Supplies and Services		31,772.739
224010 Protective Gear		2,541.819
224011 Research Expenses		22,628.268
227004 Fuel, Lubricants and Oils		37,945.725
228001 Maintenance-Buildings and Structures		11,743.203
228002 Maintenance-Transport Equipment		6,536.106
228003 Maintenance-Machinery & Equipment Other than Transport		7,462.056
228004 Maintenance-Other Fixed Assets		363.117
273102 Incapacity, death benefits and funeral expenses		1,343.532
	Total For Budget Output	147,900.000
	Wage Recurrent	0.000
	Non Wage Recurrent	147,900.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	147,900.000
	Wage Recurrent	0.000
	Non Wage Recurrent	147,900.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:010 National Crops Resources Research Institute		
Budget Output:010008 Capacity Strengthening		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
10 market-oriented products generated 5 research products and services suitable for industry developed	Submitted 7 varieties (3 cassava, 2 sweetpotato and 2 ornage maize) Waiting for invitation from VRC to defend. Application for release of 6 bean varieties compiled. Variety release applications documents for two bean varieties submitted to MAAIF, NPT trials established for 5 promising lines and data collected. 2 National Performance Trial fields (NPT) was planted with (5 maize & 5 rice) test lines to generate data for final data for variety release We conducted evaluation of rice and palatability using TRICOT evaluation method for 6 test varieties. One hybrid rice variety WDR 73 was released in a sitting that took place in December 2022. 222 clones (160 cassava and 62 sweetpotato) establsihed under TRICOT, AYT, UYT, OFTS in NaCRRI, NaS222 clones (160 cassava and 62 sweetpotato clones) establsihed under TRICOT, AYT, UYT, OFTS in NaCRRI, NaSARRI, Kiige, NgeZARDI, BulZARDI, RweZARDI, Kigumba, Oyam, Arua and Terego	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
221001 Advertising and Public Relations	12,750.000	
221008 Information and Communication Technology Supplies.	2,250.000	
221011 Printing, Stationery, Photocopying and Binding	3,750.000	
222001 Information and Communication Technology Services.	2,250.000	
223004 Guard and Security services	5,250.000	
223005 Electricity	22,350.000	
224005 Laboratory supplies and services	2,250.000	
224011 Research Expenses	34,815.000	
227004 Fuel, Lubricants and Oils	6,000.000	
228001 Maintenance-Buildings and Structures	3,750.000	
228002 Maintenance-Transport Equipment	12,000.000	
228003 Maintenance-Machinery & Equipment Other than Transport	3,000.000	
	Total For Budget Output	110,415.000
	Wage Recurrent	0.000
	Non Wage Recurrent	110,415.000
	Arrears	0.000
	AIA	0.000
Budget Output:010011 Technology Promotion		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
15 Agriculture Research products for food, nutrition and industry promoted along uptake pathways.		Five biofortified bean varieties promoted	
		3 platforms being supported and operationalised	
		Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported in the production of production and marketing of seed grain and bean derived products	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
15 Agriculture Research Innovations and IPs commercialized		Five biofortified bean varieties promoted..	
12 public-private partnerships established for technology development and promotion		3 agricultural research platforms being operationalised : i) Social media groups for TRICOT hosts & extension ii) Vine & Root producer assoscaition in Busoga Region; iii) Knowledge Hub on clean cassava seed system with Divine Organic Ltd.	
8 Agricultural research platforms established			
19 improved technologies and innovations adapted		3 platforms being supported and operationalised	
		Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported in the production of production and marketing of seed grain and bean derived products.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand	
Item		Spent	
221009 Welfare and Entertainment		2,625.000	
224003 Agricultural Supplies and Services		15,000.000	
224011 Research Expenses		57,375.000	
Total For Budget Output		75,000.000	
Wage Recurrent		0.000	
Non Wage Recurrent		75,000.000	
Arrears		0.000	
AIA		0.000	
Total For Department		185,415.000	
Wage Recurrent		0.000	
Non Wage Recurrent		185,415.000	
Arrears		0.000	
AIA		0.000	
Department:011 National Fisheries Resources Research Institute			
Budget Output:010008 Capacity Strengthening			

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 4 fish laboratories & 2 aquarium facilities maintained 4 cage research facility maintained 4 vessels and 8 research vehicles maintained	(i) Incorporated fish species distribution maps for 287 fish species and corresponding shapefiles into the biodiversity portal. The distribution maps were built using the framework of the International Union for Conservation of Nature (IUCN) for mapping the distribution of freshwater species. Therefore, the maps and shapefiles show the origin (Native, Introduced, and Origin Uncertain) and presence (Extant, Possibly Extant, Possibly Extinct, and Presence Uncertain) of the species (ii) Incorporated into the portal, species summary pages for 16 newly described species (1ii) One fish laboratory maintained and operationalised. (iv) Institute premises and assets protected and kept secure. (v) 89 Staff motivated, capacity built and productivity enhanced. (vi) One administration facility maintained and operationalised. (vii) Institute fleet (1 Marine Vessel & 2 vehicles) maintained.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
221001 Advertising and Public Relations	5,659.920	
221007 Books, Periodicals & Newspapers	2,829.960	
221008 Information and Communication Technology Supplies.	2,358.300	
221009 Welfare and Entertainment	4,480.770	
221011 Printing, Stationery, Photocopying and Binding	4,009.110	
222001 Information and Communication Technology Services.	10,022.775	
223004 Guard and Security services	7,074.900	
223005 Electricity	5,895.750	
223006 Water	5,895.750	
224011 Research Expenses	30,186.540	
227004 Fuel, Lubricants and Oils	8,843.625	
228001 Maintenance-Buildings and Structures	17,923.080	
228002 Maintenance-Transport Equipment	5,895.750	
228003 Maintenance-Machinery & Equipment Other than Transport	6,673.770	
	Total For Budget Output	117,750.000
	Wage Recurrent	0.000
	Non Wage Recurrent	117,750.000
	Arrears	0.000
	AIA	0.000
Budget Output:010010 Technology Generation		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 freshwater biodiversity portal for Uganda developed 3 georeferenced maps for fish species for Uganda produced 1 Water quality indicator and explorer developed 1 policy brief	One freshwater biodiversity portal for Uganda developed and maintained. Capacity of stakeholders strengthened 1 fish laboratories & 1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained.	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 fish laboratories and 2 aquarium facilities maintained and operationalized, 2 cage research facility maintained and operationalized. 50,000 fish seed (25,000 Labeo and 25,000 Barbus) for the aquaculture industry (hatcheries and lead farmers)	Initiated processes to acquire broodstock to produce fish fingerlings. 2 breeding cage facilities maintained and operationalized.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
224003 Agricultural Supplies and Services	18,975.000	
224011 Research Expenses	9,165.000	
227004 Fuel, Lubricants and Oils	2,025.000	
	Total For Budget Output	30,165.000
	Wage Recurrent	0.000
	Non Wage Recurrent	30,165.000
	Arrears	0.000
	AIA	0.000
	Total For Department	147,915.000
	Wage Recurrent	0.000
	Non Wage Recurrent	147,915.000
	Arrears	0.000
	AIA	0.000
Department:012 National Forestry Resources Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
5 best performing clonal avocado rootstocks determined 5 trials in avocado growing zones established 3 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled 5 multi-stakeholder innovation platforms	Work still ongoing 30,000 high quality Hass Avocado Plantlets raised from clean roots stocks and scions .	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221009 Welfare and Entertainment		3,000.000
221011 Printing, Stationery, Photocopying and Binding		3,300.000
222001 Information and Communication Technology Services.		1,800.000
222002 Postage and Courier		300.000
223001 Property Management Expenses		6,000.000
223004 Guard and Security services		7,452.000
223005 Electricity		12,510.000
224010 Protective Gear		543.000
224011 Research Expenses		3,000.000
227004 Fuel, Lubricants and Oils		9,000.000
228001 Maintenance-Buildings and Structures		3,000.000
228002 Maintenance-Transport Equipment		6,000.000
228004 Maintenance-Other Fixed Assets		3,000.000
Total For Budget Output		58,905.000
Wage Recurrent		0.000
Non Wage Recurrent		58,905.000
Arrears		0.000
AIA		0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding	4 Shea ethno-varieties in 2 Breeding Seed Orchards conserved and managed.	
One cottage industry for Annona developed Value Chain of Annona profiled		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
110,000 Hass Avocado seedlings produced and extended to famers.	Hass avocado gene bank partially maintained and avocado seedlings not produced due to limited funding	
110,000 Hass Avocado seedlings produced and extended to famers.	Hass avocado gene bank partially maintained and avocado seedlings not produced due to limited funding	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221001 Advertising and Public Relations		3,247.437
221007 Books, Periodicals & Newspapers		974.232
222001 Information and Communication Technology Services.		6,494.874

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
224011 Research Expenses		24,128.457
	Total For Budget Output	34,845.000
	Wage Recurrent	0.000
	Non Wage Recurrent	34,845.000
	Arrears	0.000
	AIA	0.000
	Total For Department	93,750.000
	Wage Recurrent	0.000
	Non Wage Recurrent	93,750.000
	Arrears	0.000
	AIA	0.000
Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Two Value added products of tomato and pineapple developed and promoted	Work still on-going on two Value added products of tomato and pineapple .	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221011 Printing, Stationery, Photocopying and Binding		5,625.000
222001 Information and Communication Technology Services.		3,474.000
223004 Guard and Security services		18,000.000
223005 Electricity		15,750.000
223006 Water		2,550.000
224011 Research Expenses		25,902.000
227004 Fuel, Lubricants and Oils		4,725.000
	Total For Budget Output	76,026.000
	Wage Recurrent	0.000
	Non Wage Recurrent	76,026.000
	Arrears	0.000
	AIA	0.000
Budget Output:010011 Technology Promotion		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
5 technology demonstration established	Two technology demonstration and mother gardens maintained for producing seedlings of coffee and cocoa.. Seedlings produced and distributed to farmers 500 for coffee and 100 for cocoa.	
50,000 coffee and 100,000 cocoa seedlings produced		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item	Spent	
221001 Advertising and Public Relations	5,625.000	
221009 Welfare and Entertainment	1,800.000	
222001 Information and Communication Technology Services.	7,945.500	
223001 Property Management Expenses	7,779.000	
224011 Research Expenses	65,673.000	
226001 Insurances	1,500.000	
228001 Maintenance-Buildings and Structures	10,125.000	
228002 Maintenance-Transport Equipment	10,301.000	
228003 Maintenance-Machinery & Equipment Other than Transport	5,150.500	
228004 Maintenance-Other Fixed Assets	1,500.000	
273102 Incapacity, death benefits and funeral expenses	4,500.000	
	Total For Budget Output	121,899.000
	Wage Recurrent	0.000
	Non Wage Recurrent	121,899.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	197,925.000
	Wage Recurrent	0.000
	Non Wage Recurrent	197,925.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:014 National Livestock Resources Research Institute (NaLIRRI)		
Budget Output:010010 Technology Generation		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 pasture system mapped & characterized	Conserved 80 tonnes of Napier silage, three months database on milk qualities, foot health and calf body weight gain.	
1 constraint diagnostic study conducted		
200 MT of conserved feed resources	Conserved 80 tonnes of Napier silage, 200 tonnes"	
150 Inbred line with different genetic back ground assembled		
200 Samples for genotyping collected & processed	Database for agronomic & nutritional /sugar biochemical developed;	
10 candidate varieties	Periodic quality assessment of ensiled through laboratory silos.	
	Dry Matter and sugar content of atleast 50 inbredlines determined.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
221003 Staff Training	15,000.000	
221008 Information and Communication Technology Supplies.	25,275.000	
221009 Welfare and Entertainment	9,372.000	
221011 Printing, Stationery, Photocopying and Binding	5,439.000	
221012 Small Office Equipment	16,119.000	
221017 Membership dues and Subscription fees.	16,521.000	
222002 Postage and Courier	8,586.000	
223001 Property Management Expenses	9,750.000	
223002 Property Rates	3,373.500	
223004 Guard and Security services	30,000.000	
223005 Electricity	30,000.000	
223006 Water	7,500.000	
224001 Medical Supplies and Services	27,445.000	
224002 Veterinary supplies and services	7,500.000	
224003 Agricultural Supplies and Services	56,375.000	
224004 Beddings, Clothing, Footwear and related Services	24,750.000	
224005 Laboratory supplies and services	12,000.000	
224011 Research Expenses	68,854.500	
225101 Consultancy Services	2,250.000	
226002 Licenses	5,250.000	
227001 Travel inland	3,750.000	
227004 Fuel, Lubricants and Oils	1,500.000	
228001 Maintenance-Buildings and Structures	31,875.000	
228002 Maintenance-Transport Equipment	23,625.000	
228004 Maintenance-Other Fixed Assets	15,000.000	
Total For Budget Output		457,110.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
	Wage Recurrent	0.000
	Non Wage Recurrent	457,110.000
	Arrears	0.000
	<i>AIA</i>	0.000
Total For Department		457,110.000
	Wage Recurrent	0.000
	Non Wage Recurrent	457,110.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:015 National Semi Arid Resources Research Institute (NaSARRI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Diversity of two crop varieties germplasm (mungbean and sesame) determined	Bacterial blight and alternaria leafspot were present in all the 3 sites but severity was low (<1 for bacterial blight in 1-5 scale and 9.5 - 20.3% alternaria). However, Fusarium wilt was present in Mukuju prison - Tororo only and incidence was high (16 - 55%).	
Five cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		<i>US\$ Thousand</i>
Item	Spent	
224003 Agricultural Supplies and Services	2,497.500	
224011 Research Expenses	11,655.000	
227004 Fuel, Lubricants and Oils	1,665.000	
228003 Maintenance-Machinery & Equipment Other than Transport	847.500	
Total For Budget Output		16,665.000
	Wage Recurrent	0.000
	Non Wage Recurrent	16,665.000
	Arrears	0.000
	<i>AIA</i>	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Generation Seed (EGS) produced to promote uptake of technologies. through private sector.	1.5 acres of NAROGRAM2 foundation seed established.	
Technologies for food, nutrition and Industry promoted in 4 Districts located 4 Argo ecological zones	6 sorghum candidate lines for malting, fodder and grain yield submitted for release. 108 lines under evaluation for grain quality (54), and striga (54), 7 acres of seed multiplication field/demos established in Masindi, Ikulwe, and Amuria	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221001 Advertising and Public Relations		2,250.000
221007 Books, Periodicals & Newspapers		3,750.000
221008 Information and Communication Technology Supplies.		8,250.000
221009 Welfare and Entertainment		3,750.000
221011 Printing, Stationery, Photocopying and Binding		2,250.000
222001 Information and Communication Technology Services.		1,500.000
223001 Property Management Expenses		3,000.000
223004 Guard and Security services		7,200.000
223005 Electricity		10,800.000
223006 Water		3,000.000
224011 Research Expenses		16,500.000
226001 Insurances		750.000
227004 Fuel, Lubricants and Oils		4,500.000
228002 Maintenance-Transport Equipment		4,500.000
273102 Incapacity, death benefits and funeral expenses		3,000.000
	Total For Budget Output	75,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	75,000.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	91,665.000
	Wage Recurrent	0.000
	Non Wage Recurrent	91,665.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:016 Ngetta ZARDI		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
3 new multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed	Trial established 2 acres groundnut , 2 acres of bean and 2 acres of of soya bean harvested and post harvest processing conducted to disseminate farming community.	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
212103 Incapacity benefits (Employees)		9,000.000
221011 Printing, Stationery, Photocopying and Binding		1,500.000
223006 Water		5,250.000
224003 Agricultural Supplies and Services		12,000.000
224011 Research Expenses		48,510.000
228001 Maintenance-Buildings and Structures		3,750.000
228002 Maintenance-Transport Equipment		3,750.000
228003 Maintenance-Machinery & Equipment Other than Transport		3,750.000
	Total For Budget Output	87,510.000
	Wage Recurrent	0.000
	Non Wage Recurrent	87,510.000
	Arrears	0.000
	<i>AIA</i>	0.000
	Total For Department	87,510.000
	Wage Recurrent	0.000
	Non Wage Recurrent	87,510.000
	Arrears	0.000
	<i>AIA</i>	0.000
Department:017 Rwebitaba ZARDI		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
40,000 clonal plantlets of selected tea clones multiplied. 15 tea clones characterized for biochemical attributes 1000 open pollinated hybrid tea seeds collected	94 Tea accessions genotyped using DART technology for diversity and genomic selection purposes.	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221003 Staff Training		4,246.449
221007 Books, Periodicals & Newspapers		2,123.226
221008 Information and Communication Technology Supplies.		3,963.354
221009 Welfare and Entertainment		3,538.707
221011 Printing, Stationery, Photocopying and Binding		4,246.449

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
222001 Information and Communication Technology Services.		6,935.868
223001 Property Management Expenses		7,785.156
223004 Guard and Security services		6,228.126
223005 Electricity		4,246.449
223006 Water		8,492.798
224003 Agricultural Supplies and Services		8,422.125
224004 Beddings, Clothing, Footwear and related Services		2,830.965
224011 Research Expenses		46,870.182
226001 Insurances		849.291
227004 Fuel, Lubricants and Oils		12,031.605
228001 Maintenance-Buildings and Structures		3,538.707
228002 Maintenance-Transport Equipment		11,323.866
228004 Maintenance-Other Fixed Assets		4,529.547
	Total For Budget Output	142,202.870
	Wage Recurrent	0.000
	Non Wage Recurrent	142,202.870
	Arrears	0.000
	AIA	0.000
	Total For Department	142,202.870
	Wage Recurrent	0.000
	Non Wage Recurrent	142,202.870
	Arrears	0.000
	AIA	0.000
<i>Development Projects</i>		
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)		
Budget Output:000017 Infrastructure Development and Management		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed.	1) Substructure of queen rearing facility and Goat research facility constructed;	
1 kilometer of barbed wire fence constructed.	3) Construction of Calf/heifer barn at Nakyesasa completed	
	4) Super-structure of residential staff quarters constructed;	
	5) Research bull-stud at Nakyesasa at 80% completion.	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.		1) Development of water supply and distribution system at Maruzi completed, 2) Construction of Maruzi access roads completed; 3) Milking and milking processing platform at Nakyesasa operationalized, 4) Water supply and distribution system developed at Maruzi, 5) Substructure of residential staff quarters constructed;	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs			UShs Thousand
Item		Spent	
312121 Non-Residential Buildings - Acquisition		249,573.124	
Total For Budget Output		249,573.124	
GoU Development		249,573.124	
External Financing		0.000	
Arrears		0.000	
AIA		0.000	
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
3MT tons of forage seed produced, 2 high yielding brachiria developed,3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 p		1) 2 tons of Chloris seed (100 acres) harvested; 2) 7.5tons of dairy feed supplement (20 acres) produced; 2) 150 tons of hay (100 acres) produced; 3) 800 tons of maize silage produced;	
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
4 Community Constraint Diagnostic Studies Conducted Development per participating sub-region 1 demo site each on beef, dairy cattle; Goat and pigs established 1 on-farm prediction tool/Model for determination of Pasture productivity developed		NA	
3MT tons of forage seed produced, 2 high yielding brachiria developed,3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 p		1) 20 acres bush cleared for bee forage production fields established. 2) 2 tons of Chloris seed (100 acres) harvested; 3) 7.5tons of dairy feed supplement (20 acres) produced;	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs			UShs Thousand
Item		Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)		110,000.000	
221003 Staff Training		13,000.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item		Spent
221008 Information and Communication Technology Supplies.		20,000.000
221011 Printing, Stationery, Photocopying and Binding		15,000.000
222001 Information and Communication Technology Services.		24,000.000
223004 Guard and Security services		7,000.000
223005 Electricity		15,000.000
224003 Agricultural Supplies and Services		150,000.000
224004 Beddings, Clothing, Footwear and related Services		10,000.000
224005 Laboratory supplies and services		63,000.000
224011 Research Expenses		189,508.968
227003 Carriage, Haulage, Freight and transport hire		6,000.000
227004 Fuel, Lubricants and Oils		80,000.000
228001 Maintenance-Buildings and Structures		29,000.000
228002 Maintenance-Transport Equipment		50,000.000
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		100,000.000
	Total For Budget Output	881,508.968
	GoU Development	881,508.968
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
	Total For Project	1,131,082.092
	GoU Development	1,131,082.092
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
Project:1619 Retooling of National Agricultural Research Organization		
Budget Output:000003 Facilities and Equipment Management		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 research laboratories equipped and supplied with consumables to support research.	4 research laboratories equipped and supplied with consumables to support research.	
Seven research laboratories maintained	Four research laboratories maintained	
Five research laboratories Audited and upgraded towards accreditation	The process has been initiated to accredit of five research laboratories	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Project:1619 Retooling of National Agricultural Research Organization		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Four Agricultural research laboratories of strategic importance equipped 16 Agricultural research Institutes retooled with 24 units of transport equipment to support research 16 Public Agricultural research Institutes retooled with computers	Procurement process initiated for transport equipment and computers in anticipation of adequate funds in quarter three	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
	Total For Budget Output	0.000
	GoU Development	0.000
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of five National laboratories. 10 titles acquired for research land	Staff facilitated to attend long-term and short term skills improvement programmes (tuition fees payment for 4 PhD students, 2 Masters and 6 staff facilitated to attend a short term skills enhancement training). Subscription paid for 2 Engineers, 3 ICPAU members, 1 ICSA member, and 1 member of Uganda Law Society and E.African Law Society	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item	Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	22,254.600	
211107 Boards, Committees and Council Allowances	232,192.950	
221001 Advertising and Public Relations	8,515.000	
221003 Staff Training	33,675.000	
221008 Information and Communication Technology Supplies.	6,490.000	
221009 Welfare and Entertainment	5,000.000	
221016 Systems Recurrent costs	10,650.000	
221017 Membership dues and Subscription fees.	5,817.720	
222001 Information and Communication Technology Services.	8,725.008	
223005 Electricity	500.000	
224011 Research Expenses	3,586,287.280	
225101 Consultancy Services	9,290.000	
225204 Monitoring and Supervision of capital work	106,120.000	
227001 Travel inland	54,504.000	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
Project:1619 Retooling of National Agricultural Research Organization			
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand	
Item		Spent	
227004 Fuel, Lubricants and Oils		107,166.400	
228001 Maintenance-Buildings and Structures		1,430.000	
228002 Maintenance-Transport Equipment		6,000.000	
Total For Budget Output		4,204,617.958	
GoU Development		4,204,617.958	
External Financing		0.000	
Arrears		0.000	
AIA		0.000	
Budget Output:010009 Research Partnerships			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
NNARO annual subscription to four international research organizations maintained for technology generation and transfer for improved production and productivity.		Postponed as to when funds are available and adequate	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand	
Item		Spent	
262201 Contributions to International Organisations-Capital		599,867.691	
Total For Budget Output		599,867.691	
GoU Development		599,867.691	
External Financing		0.000	
Arrears		0.000	
AIA		0.000	
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
35 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 12 research products and services suitable for food Nutrition and industry developed		8 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. Work is still on-going. 3 of research products and services suitable for food Nutrition and industry developed. These include 5 new varieties (3-cassava & 2 sweet potato) submitted to Variety release committee; 10 National Performance Trial (NPT) for cassava established.	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Project:1619 Retooling of National Agricultural Research Organization		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)		55,384.496
221001 Advertising and Public Relations		1,000.000
221003 Staff Training		8,450.000
221008 Information and Communication Technology Supplies.		2,806.256
221011 Printing, Stationery, Photocopying and Binding		11,339.504
221012 Small Office Equipment		100.000
222002 Postage and Courier		4,625.008
223005 Electricity		1,000.000
223006 Water		400.000
224002 Veterinary supplies and services		7,792.000
224003 Agricultural Supplies and Services		1,148,393.986
224005 Laboratory supplies and services		106,600.000
224011 Research Expenses		2,728,213.673
225101 Consultancy Services		26,000.000
227001 Travel inland		40,989.008
227004 Fuel, Lubricants and Oils		27,335.774
228002 Maintenance-Transport Equipment		5,037.500
228003 Maintenance-Machinery & Equipment Other than Transport Equipment		100.000
228004 Maintenance-Other Fixed Assets		6,250.000
Total For Budget Output		4,181,817.205
GoU Development		4,181,817.205
External Financing		0.000
Arrears		0.000
AIA		0.000
Budget Output:010011 Technology Promotion		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter
Project: 1619 Retooling of National Agricultural Research Organization		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
5 agricultural research innovations and IPs commercialized	3 multi-stakeholders agricultural research innovation platforms established.	
5 multi-stakeholders agricultural research innovation platforms established	7 climate-smart technologies demonstrations established in the ZARDIs	
9 climate-smart technologies demonstrations established in all the ZARDIs	6 Public-Private Partnerships established for for technology development and promotion.	
16 Public-Private Partnerships established	On seed, as a strategic intervention to scale up food and feed production, the Government of Uganda is supporting NARO for increased seed production for major food and feed commodities. NaCRRI was mandated to produce seed for maize and beans and it undertaking this at 2 sites, at Namulonge and Kiige satellite stations in Kamuli district. The target is cultivate 100 acres of Maize seed, and 100 acres of Bean seed at NaCRRI and 500 Acres of Maize seed at Kiige satellite station. Currently, 119 acres of land at NaCRRI and 40.5 acres of land at Bukalasa Agricultural College have been already planted and are being maintained. In eastern Uganda, for sorghum, the seed class being produced given the planting material used (foundation seed) and field m	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		US\$ Thousand
Item	Spent	
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	27,362.000	
221001 Advertising and Public Relations	84,174.000	
221003 Staff Training	3,330.000	
221008 Information and Communication Technology Supplies.	200.000	
221009 Welfare and Entertainment	45,914.000	
221011 Printing, Stationery, Photocopying and Binding	8,656.496	
222001 Information and Communication Technology Services.	24,125.008	
224002 Veterinary supplies and services	2,880.000	
224003 Agricultural Supplies and Services	522,125.995	
224011 Research Expenses	1,411,870.264	
226002 Licenses	14,995.000	
227001 Travel inland	17,028.900	
227004 Fuel, Lubricants and Oils	4,088.000	
Total For Budget Output	2,166,749.663	
GoU Development	2,166,749.663	
External Financing	0.000	
Arrears	0.000	
AIA	0.000	
Total For Project	11,153,052.517	
GoU Development	11,153,052.517	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Planned Outputs		Cumulative Outputs Achieved by End of Quarter	
	External Financing		0.000
	Arrears		0.000
	AIA		0.000
	GRAND TOTAL		45,337,929.389
	Wage Recurrent		19,902,554.636
	Non Wage Recurrent		13,007,477.626
	GoU Development		12,284,134.609
	External Financing		0.000
	Arrears		143,762.518
	AIA		0.000

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Quarter 3: Revised Workplan

Annual Plans		Quarter's Plan	Revised Plans
Programme:01 Agro-Industrialization			
SubProgramme:01			
Sub SubProgramme:01 Agricultural Research			
<i>Departments</i>			
Department:007 NARO-SECRETARIATE			
Budget Output:000001 Audit and Risk Management			
PIAP Output: 01040701 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
11 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research.	2 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research.	2 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research.	
Budget Output:000014 Administrative and Support Services			
PIAP Output: 01040701 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
Annual subscription for insurance of research vessels, machinery and equipment maintained. 6Public-Private Partnerships established for technology 16 research support infrastructure establishment supported 8 Governing council sessions supported	Annual subscription for insurance of research vessels, machinery and equipment maintained. 1Public-Private Partnership established for technology development and transfer ,1 research support infrastructure establishment supported 8 Governing council sessions supported 4 research supervisory support missions conducted	Annual subscription for insurance of research vessels, machinery and equipment maintained. 1Public-Private Partnership established for technology development and transfer ,1 research support infrastructure establishment supported 8 Governing council sessions supported 4 research supervisory support missions conducted	
<i>Development Projects</i>			
N/A			
SubProgramme:02			
Sub SubProgramme:01 Agricultural Research			
<i>Departments</i>			
Department:001 Abi Zonal Agriculture Research Institute(ZARDI)			
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture technologies developed			
Programme Intervention: 010407 Strengthen agricultural research and technology development			
13 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 56,000 seedlings of (10,000) Mango, five thousand (5,000) Citrus, Ten thousand (10,000) Avocado	3 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 14,000 seedlings of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado	3 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 14,000 seedlings of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product	1 highly nutritious composite products one cereal gene bank established	1 highly nutritious composite products one cereal gene bank established
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product	1 highly nutritious composite products one cereal gene bank established	1 highly nutritious composite products one cereal gene bank established
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Two functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 2 selected commodities of sorghum and goats in West Nile region	One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 1 selected commodity West Nile region	One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 1 selected commodity West Nile region
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Forty-five thousand high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted Two climate resilient and farmer preferred dry land legumes varieties 6 newly released root crop varieties promoted	11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preferred dry land legume variety 1 newly released root crop variety promoted	11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preferred dry land legume variety 1 newly released root crop variety promoted
Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 partnerships promoted for technology generation 2 research products commercialized 3 research platforms established	1 partnership promoted for technology generation 1 research products commercialized 1 research platform established	1 partnership promoted for technology generation 1 research products commercialized 1 research platform established

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Four (4) Industrial products for yield improvement and commercialization developed for industry	1 Industrial products for yield improvement and commercialization developed for industry	1 Industrial products for yield improvement and commercialization developed for industry
Two varieties with adequate resistance to major pests and diseases developed to support house food security and incomes Two packages for sustainable disease management in Arabica coffee and potato developed	1 package for sustainable disease management in Arabica coffee and potato developed	1 package for sustainable disease management in Arabica coffee and potato developed
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 pests resistant varieties 2 disease management packages for strategic crops Generate 25 tons of potato seed 15 adaptive trials, demos 4 Industrial products for yield improvement developed 4 scientific papers published	1 pests resistant varieties 2 disease management packages for strategic crops Generate 5 tons of potato seed 5 adaptive trials, demos 1Industrial products for yield improvement 1 scientific paper published	1 pests resistant varieties 2 disease management packages for strategic crops Generate 5 tons of potato seed 5 adaptive trials, demos 1Industrial products for yield improvement 1 scientific paper published
Budget Output:010011 Technology Promotion		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes	1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes	1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes
15 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies	3 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies	3 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies
PIAP Output: 0103020112 Agricultural Research platforms established		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted	2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted	2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted
Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI)		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
2 MSIPs (Soybean and Rice) Initiated to promote technologies 5 crop, 3 livestock and 2 post-harvest handling technologies & practices promoted 5 Climate smart agricultural technologies demonstrated	1 MSIPs (Soybean and Rice) Initiated to promote technologies 1 crop, 1 livestock and 1 post-harvest handling technologies & practices promoted 1 Climate smart agricultural technologies demonstrated	1 MSIPs (Soybean and Rice) Initiated to promote technologies 1 crop, 1 livestock and 1 post-harvest handling technologies & practices promoted 1 Climate smart agricultural technologies demonstrated
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed	Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed	Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed
Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed	Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed	Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed
Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Six technologies promoted for food, nutrition and industry Two technologies for food and nutrition security generated	1 technologies promoted 1 technologies for food and nutrition security generated	1 technologies promoted 1 technologies for food and nutrition security generated
8 Demand driven agriculture technologies developed and promoted for food and nutrition security; and industry	2 Demand driven agriculture technologies developed and promoted	2 Demand driven agriculture technologies developed and promoted
8 Demand driven agriculture technologies developed and promoted for food and nutrition; and industry	2 Demand driven agriculture technologies developed and promoted	2 Demand driven agriculture technologies developed and promoted
Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Five technologies for food, nutrition and industry promoted in ten districts of the Zone Two technologies generated for market and Industry 6 Research facilities maintained to support research	1 technologies for food, nutrition and industry promoted in 2 districts of the Zone 1 technologies generated for market and Industry 1 Research facilities maintained to support research	1 technologies for food, nutrition and industry promoted in 2 districts of the Zone 1 technologies generated for market and Industry 1 Research facilities maintained to support research

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI)		
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Seven (07) technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined.	2 technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1 biological control strategies on FAW and desert locusts determined.	NA
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Seven (07) technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined.	2 technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1 biological control strategies on FAW and desert locusts determined.	2 technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1 biological control strategies on FAW and desert locusts determined.
4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers	1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers	1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers
4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers	1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers	1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers
Department:007 NARO-SECRETARIATE		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed,	1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed	1 Impact report on sorghum technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed
1 biosecurity access point for the vaccine research facility diverted and maintained as per guidance from from National Council of science and technology for National Bio safety committee, PANVAC and global acceptability for commercialization.	NA	1 biosecurity access point for the vaccine research facility diverted and maintained as per guidance from from NationalCouncil of science and technology for National Bio safety committee,PANVAC and global acceptability for commercialization.
Department:008 National Agricultural Research Laboratories		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize 5 Agriculture Research Innovations and IPs commercialized 4 research products and services for food and nutrition s	2 Agriculture Research Innovations and IPs commercialized 1research products and services for food and nutrition security	2 Agriculture Research Innovations and IPs commercialized 1research products and services for food and nutrition security
Department:009 National Coffee Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refi	1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi	1 alternative pathway for utilization of cocoawaste developed. Best-bet coffee system for optimum water useefficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed. 2 Coffee byproducts refined.
PIAP Output: 0103020116 Functional public-private partnerships established for technology development and promotion		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refine	1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi	1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi
Department:010 National Crops Resources Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
10 market-oriented products generated 5 research products and services suitable for industry developed	3 market-oriented products generated 5 research products and services suitable for industry developed	3 market-oriented products generated 5 research products and services suitable for industry developed
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
15 Agriculture Research products for food, nutrition and industry promoted along uptake pathways.	5 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways.	5 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways.

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010011 Technology Promotion		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
15 Agriculture Research Innovations and IPs commercialized 12 public-private partnerships established for technology development and promotion 8 Agricultural research platforms established 19 improved technologies and innovations adapted	3 Agriculture Research Innovations and IPs commercialized 3 public-private partnerships established for technology development and promotion 2Agricultural research platforms established 5 improved technologies and innovations adapted	3 Agriculture Research Innovations and IPs commercialized 3 public-private partnerships established for technology development and promotion 2Agricultural research platforms established 5 improved technologies and innovations adapted
Department:011 National Fisheries Resources Research Institute		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 4 fish laboratories & 2 aquarium facilities maintained 4 cage research facility maintained 4 vessels and 8 research vehicles maintained	1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories & 1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained	1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories & 1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 freshwater biodiversity portal for Uganda developed 3 georeferenced maps for fish species for Uganda produced 1 Water quality indicator and explorer developed 1 policy brief	1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories & 1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained	1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories & 1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 fish laboratories and 2 aquarium facilities maintained and operationalized, 2 cage research facility maintained and operationalized. 50,000 fish seed (25,000 Labeo and 25,000 Barbus) for the aquaculture industry (hatcheries and lead farmers)	12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers)	12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers)
Department:012 National Forestry Resources Research Institute		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
5 best performing clonal avocado rootstocks determined 5 trials in avocado growing zones established 3 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled 5 multi-stakeholder innovation platforms	1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled	1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona profiled	4 Shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding	4 Shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
110,000 Hass Avocado seedlings produced and extended to famers.	27500 Hass Avocado seedlings produced and extended to famers.	27500 Hass Avocado seedlings produced and extended to famers.
110,000 Hass Avocado seedlings produced and extended to famers.	27500 Hass Avocado seedlings produced and extended to famers.	7500 Hass Avocado seedlings produced and extended to famers.
Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Two Value added products of tomato and pineapple developed and promoted	2 Value added products of tomato and pineapple developed and promoted	2 Value added products of tomato and pineapple developed and promoted
Budget Output:010011 Technology Promotion		
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
5 technology demonstration established 50,000 coffee and 100,000 cocoa seedlings produced	1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced	1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced
Department:014 National Livestock Resources Research Institute (NaLIRRI)		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
1 pasture system mapped & characterized 1 constraint diagnostic study conducted 200 MT of conserved feed resources 150 Inbred line with different genetic back ground assembled 200 Samples for genotyping collected & processed 10 candidate varieties	50 MT of conserved feed resources produced 50 Inbred line with different genetic back ground assembled 50 Samples for genotyping collected & processed	50 MT of conserved feed resources produced 50 Inbred line with different genetic back ground assembled 50 Samples for genotyping collected & processed
Department:015 National Semi Arid Resources Research Institute (NaSARRI)		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Diversity of two crop varieties germplasm (mungbean and sesame) determined Five cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,	Diversity of 1 crop variety germplasm determined, 1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,	Diversity of 1 crop variety germplasm determined, 1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Generation Seed (EGS) produced to promote uptake of technologies. through private sector. Technologies for food, nutrition and Industry promoted in 4 Districts located 4 Argo ecological zones	Generation Seed (EGS) produced to promote uptake of 4 technologies. through private sector. Technologies for food, nutrition and Industry promoted in 1 Districtg located 1 Argo ecological zones	Generation Seed (EGS) produced to promote uptake of 4 technologies. through private sector. Technologies for food, nutrition and Industry promoted in 1 Districtg located 1 Argo ecological zones
Department:016 Ngetta ZARDI		
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
3 new multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed	1 New multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed 3 acre	1 New multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed 3 acre
Department:017 Rwebitaba ZARDI		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
40,000 clonal plantlets of selected tea clones multiplied. 15 tea clones characterized for biochemical attributes 1000 open pollinated hybrid tea seeds collected	10,000 clonal plantlets of selected tea clones multiplied. 5 tea clones characterized for biochemical attributes ,2500 open pollinated hybrid tea seeds collected	10,000 clonal plantlets of selected tea clones multiplied. 5 tea clones characterized for biochemical attributes ,2500 open pollinated hybrid tea seeds collected
<i>Development Projects</i>		
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)		
Budget Output:000017 Infrastructure Development and Management		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.
Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
3MT tons of forage seed produced, 2 high yielding brachiria developed,3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 p	1MT ton of forage seed produced, 1 high yielding brachiria developed,1 low-cost pig feeding packages based on forages and animal waste developed, 2 forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 of Jersey crosses	1MT ton of forage seed produced, 1 high yielding brachiria developed,1 low-cost pig feeding packages based on forages and animal waste developed, 2 forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 of Jersey crosses
PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
4 Community Constraint Diagnostic Studies Conducted Development per participating sub-region 1 demo site each on beef, dairy cattle; Goat and pigs established 1 on-farm prediction tool/Model for determination of Pasture productivity developed	1 Community Constraint Diagnostic Study Conducted	1 Community Constraint Diagnostic Study Conducted
3MT tons of forage seed produced, 2 high yielding brachiria developed,3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 p	NA	1 MT tons of forage seed produced, 2 high yielding brachiria developed, 3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans			Quarter's Plan			Revised Plans		
Project:1619 Retooling of National Agricultural Research Organization								
Budget Output:000003 Facilities and Equipment Management								
PIAP Output: 01040705 Demand driven agriculture technologies developed								
Programme Intervention: 010407 Strengthen agricultural research and technology development								
4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation			NA			4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation		
Four Agricultural research laboratories of strategic importance equipped 16 Agricultural research Institutes retooled with 24 units of transport equipment to support research 16 Public Agricultural research Institutes retooled with computers			8 Public Agricultural research Institutes retooled with computers			8 Public Agricultural research Institutes retooled with computers		
Budget Output:010008 Capacity Strengthening								
PIAP Output: 01040705 Demand driven agriculture technologies developed								
Programme Intervention: 010407 Strengthen agricultural research and technology development								
NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of five National laboratories. 10 titles acquired for research land			NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of 1 National laboratories. 2 titles acquired for research land			NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of 1 National laboratories. 2 titles acquired for research land		
Budget Output:010009 Research Partnerships								
PIAP Output: 01040705 Demand driven agriculture technologies developed								
Programme Intervention: 010407 Strengthen agricultural research and technology development								
NNARO annual subscription to four international research organizations maintained for technology generation and transfer for improved production and productivity.			NNARO annual subscription to 1 international research organizations maintained			NNARO annual subscription to 1 international research organizations maintained		
Budget Output:010010 Technology Generation								
PIAP Output: 01040705 Demand driven agriculture technologies developed								
Programme Intervention: 010407 Strengthen agricultural research and technology development								
35 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 12 research products and services suitable for food Nutrition and industry developed			9 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 3 of research products and services suitable for food Nutrition and industry developed			9 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 3 of research products and services suitable for food Nutrition and industry developed		

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Annual Plans	Quarter's Plan	Revised Plans
Project:1619 Retooling of National Agricultural Research Organization		
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies developed		
Programme Intervention: 010407 Strengthen agricultural research and technology development		
5 agricultural research innovations and IPs commercialized 5 multi-stakeholders agricultural research innovation platforms established 9climate-smart technologies demonstrations established in all the ZARDIs 16Public-Private Partnerships established	1 agricultural research innovations and IPs commercialized, 1multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-Private Partnerships established for for technology development and promotion	1 agricultural research innovations and IPs commercialized, 1multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-Private Partnerships established for for technology development and promotion

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

V4: NTR Collections, Off Budget Expenditure and Vote Cross Cutting Issues

Table 4.1: NTR Collections (Billions)

Revenue Code	Revenue Name	Planned Collection FY2022/23	Actuals By End Q2
142120	Sale of Agricultural products and services.-From Private Entities	0.891	0.796
141541	Rent & Rates - Non-Produced Assets – from Gov’t units	0.262	0.824
142119	Sale of bid documents-From Private Entities	0.025	0.001
Total		1.178	1.621

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table 4.2: Off-Budget Expenditure By Department and Project

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

Table 4.3: Vote Crosscutting Issues

i) Gender and Equity

Objective:	Promote gender responsive technologies
Issue of Concern:	low agricultural production and productivity, poor storage infrastructure and post harvest management; low value addition; poor market access and low competitive
Planned Interventions:	Development, promotion and commercialisation of gender responsive technologies, innovations, information and management practices for improved agricultural production and productivity,
Budget Allocation (Billion):	0.156
Performance Indicators:	Number of Gender responsive technologies (5) generated, promoted and commercialized.
Actual Expenditure By End Q2	0.070
Performance as of End of Q2	3 maize technologies which are gender responsive where released. One potato variety released as NAROPOT 5, and one potato variety promoted as NAROPOT 6
Reasons for Variations	

ii) HIV/AIDS

Objective:	Minimize new infections and protect the positive living
Issue of Concern:	High level of new infections of HIV/AIDS
Planned Interventions:	NARO shall sensitize staff and improve welfare of positive living staff.
Budget Allocation (Billion):	0.159
Performance Indicators:	Number of staff sensitized
Actual Expenditure By End Q2	0.024
Performance as of End of Q2	60 staff from Mukono ZARDI sensitised about HIV/AIDS
Reasons for Variations	

iii) Environment

Objective:	Develop and promote climate responsive and environmentally friendly technologies
Issue of Concern:	Concerns arising from extreme climate variability & their resultant effects like land fragility, landslides, soil erosion, disease epidemics, loss of biodiversity, & the lack of technologies, information, innovations, & environmentally sound practices
Planned Interventions:	NARO will strengthen the capacity for NARO institutional biosafety committee (NARO IBC), NARO Institution Animal care use committee to guide environmentally friendly and sound research Preservation and Conservation of national germ plasm
Budget Allocation (Billion):	0.200
Performance Indicators:	No of interventions (4) by the committees established. No of genetic materials (250) conserved Number of technologies (5) generated and promoted to counter environmental emerging concerns.
Actual Expenditure By End Q2	0.75
Performance as of End of Q2	NARO undertook plant conservation. The gene bank received 500 accessions.
Reasons for Variations	

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 2

iv) Covid

Objective:	Maintain a covid-19 free and healthy workforce and work place (office, laboratory and field and covid1-9 responsive technologies)
Issue of Concern:	covid 19 is still a threat that has the potential to disrupt agricultural research system, services, products and research stakeholders.
Planned Interventions:	Implement GOU SOPS across Public Agricultural Research Institutes and promotion of technologies which help in the management of Covid 19, while integrating Covid 19 treatment in NARO medical insurance scheme.
Budget Allocation (Billion):	0.350
Performance Indicators:	No of innovations and technologies (2) promoted for the management of Covid 19
Actual Expenditure By End Q2	0100
Performance as of End of Q2	NARO is implimenting GOU sops as standard office undertaking. All office access have improved restrictions. Regular sanitising and utilising zoom meeting technologies has been implimented.
Reasons for Variations	

