#### **VOTE:** 142 National Agricultural Research Organization (NARO)

Quarter 1

#### V1: Summary of Issues in Budget Execution

**Table V1.1: Overview of Vote Expenditures (UShs Billion)** 

		Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% Budget Released	% Budget Spent	% Releases Spent
D	Wage	38,811,109.27	39,811,109.27	9,952,777.318	9,702,777.318	25.6 %	25.0 %	97.5 %
Recurrent	Non-Wage	29,396,769.39	29,396,769.39	7,046,595.449	6,177,310.196	24.0 %	21.0 %	87.7 %
Doort	GoU	48,575,474.57	48,575,474.57	10,000,000.00	6,501,621.900	20.6 %	13.4 %	65.0 %
Devt.	Ext Fin.	0.000	0.000	0.000	0.000	0.0 %	0.0 %	0.0 %
	GoU Total	116,783,353.2	117,783,353.2	26,999,372.76	22,381,709.41	23.1 %	19.2 %	82.9 %
Total GoU+Ext	Fin (MTEF)	116,783,353.2	117,783,353.2	26,999,372.76	22,381,709.41	23.1 %	19.2 %	82.9 %
	Arrears	143,762.517	143,762.517	143,762.517	143,762.518	100.0 %	100.0 %	100.0 %
	Total Budget	116,927,115.7	117,927,115.7	27,143,135.28	22,525,471.93	23.2 %	19.3 %	83.0 %
	A.I.A Total	0.000	0.000	0.000	0.000	0.0 %	0.0 %	0.0 %
	<b>Grand Total</b>	116,927,115.7	117,927,115.7	27,143,135.28	22,525,471.93	23.2 %	19.3 %	83.0 %
Total Vote Budg	get Excluding Arrears	116,783,353.2 39	117,783,353.2 39	26,999,372.76 7	22,381,709.41	23.1 %	19.2 %	82.9 %

#### **VOTE:** 142 National Agricultural Research Organization (NARO)

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

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% Budget Released	% Budget Spent	%Releases Spent
Programme:01 AGRO-INDUSTRIALIZATION	116.927	117.927	27.144	22.526	27.1 %	22.5 %	83.0 %
Sub SubProgramme:01 Agricultural Research	116.927	117.927	27.144	22.526	27.1 %	22.5 %	83.0 %
Total for the Vote	116.927	117.927	27.144	22.526	27.1 %	22.5 %	83.0 %

#### VOTE: 142 National Agricultural Research Organization (NARO)

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#### Table V1.3: High Unspent Balances and Over-Expenditure in the Approved Budget (Ushs Bn)

Departments, Projects

Sub SubProgramme:01 Agricultural Research

#### **Sub Programme: 01 Institutional Strengthening and Coordination**

**0.662** Bn Shs Department: 007 NARO-SECRETARIATE

Reason: Allowances to casual workers paid. However, transactions remained un cleared through IFMS System.

Workmen's' Compensation paid. However, transactions remained un cleared by IFMS System

Funds paid to supplies but transactions were not completed through IFMS System.

Supplier's bank accounts had some IFMS registration issues

Invoice from one supplier was not received by end of the quarter

Items		
0.101	UShs	211106 Allowances (Incl. Casuals, Temporary, sitting allowances)
		Reason: Allowances to casual workers paid. However, transactions remained un cleared through IFMS System
0.053	UShs	212103 Incapacity benefits (Employees)
		Reason: Workmen's' Compensation paid. However, transactions remained un cleared by IFMS System

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**Departments**, Projects

Sub SubProgramme:01 Agricultural Research

Sub Programme: 02 Agricultural Production and Productivity

**0.662** Bn Shs Department: 007 NARO-SECRETARIATE

Reason: Allowances to casual workers paid. However, transactions remained un cleared through IFMS System.

Workmen's' Compensation paid. However, transactions remained un cleared by IFMS System

Funds paid to supplies but transactions were not completed through IFMS System.

Supplier's bank accounts had some IFMS registration issues

Invoice from one supplier was not received by end of the quarter

Items		
0.060	UShs	224003 Agricultural Supplies and Services
		Reason: Funds paid to supplies but transactions were not completed through IFMS System
0.531	UShs	224011 Research Expenses
		Reason: Funds paid to supplies but transactions were not completed through IFMS System
0.000	Bn Shs	Project: 1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)
	Reason	0
Items		
3.475	Bn Shs	Project: 1619 Retooling of National Agricultural Research Organization
	Reason	0
Items		
0.491	UShs	224003 Agricultural Supplies and Services
		Reason: Part of Seed Multiplication intervention funds paid to various Suppliers under their contracts for various Agricultural Supplies and Services but payments were not cleared through IFMS system by end of the quarter, as NARO received the fund late in the quarter
2.984	UShs	224011 Research Expenses
	<u> </u>	Reason: Part of Seed Multiplication intervention funds paid to various Suppliers under their contracts

Reason: Part of Seed Multiplication intervention funds paid to various Suppliers under their contracts for various research expenses but payments were not cleared through IFMS system by end of the quarter, as NARO received the fund late in the quarter

VOTE: 142 National Agricultural Research Organization (NARO)

# VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

#### 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								
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1					
Number of improved cotton varieties developed	Number	6						
Budget Output 000014 Administrative and Support Services								
PIAP Output 01040701 Demand driven agriculture technologies de	eveloped							
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1					
Number of functional public-private partnerships established for technology development and promotion	Number	14	5					
Number of improved technologies and innovations adopted	Number	20	2					
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 de	eveloped							
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1					
Number of market-oriented products generated	Number	4	0					
Number of functional public-private partnerships established for technology development and promotion	Number	4	0					
Budget Output 010011 Technology Promotion								
PIAP Output 01040705 Demand driven agriculture technologies de	eveloped							
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1					
Number of market-oriented products generated	Number	1	0					
Number of functional public-private partnerships established for technology development and promotion	Number	2	0					
Number of improved technologies and innovations adopted	Number	3	0					
Number of markets created along product lines	Number	1	0					

### **VOTE:** 142 National Agricultural Research Organization (NARO)

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

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Programme:01 AGRO-INDUSTRIALIZATION							
SubProgramme:02 Agricultural Production and Productivity							
Sub SubProgramme:01 Agricultural Research							
Department:002 Buginyaya Zonal Agriculture Research Institute	e(ZARDI)						
Budget Output 010010 Technology Generation							
PIAP Output 01040706 Research-extension farmer linkages developed and strengthened							
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1				
Number of technologies adopted	Number	2	0				
Budget Output 010011 Technology Promotion							
PIAP Output 01040705 Demand driven agriculture technologies	developed						
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1				
Number of research products and services for food and nutrition security generated	Number	2	0				
PIAP Output 01040706 Research-extension farmer linkages deve	loped and strengthene	d					
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1				
Number of District Adaptive Research Support Teams (DARSTs) developed	Number	2	0				
Number of technologies adopted	Number	4	0				
Department:003 Bulindi Zonal Agriculture Research Institute(Za	ARDI)	-					
Budget Output 010010 Technology Generation							
PIAP Output 01040705 Demand driven agriculture technologies	developed						
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1				
Number of market-oriented products generated	Number	1	0				
Number of improved technologies and innovations adopted	Number	9	0				
Number of research products and services for food and nutrition security generated	Number	5	0				
PIAP Output 01040706 Research-extension farmer linkages deve	loped and strengthene	d					
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1				
Number of District Adaptive Research Support Teams (DARSTs) developed	Number	2	0				
Number of technologies adopted	Number	9	1				

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Programme:01 AGRO-INDUSTRIALIZATION			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:004 Kachwekano Zonal Agriculture Research Instit	tute(ZARDI)		
Budget Output 010010 Technology Generation			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
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	0
Department:005 Mbarara Zonal Agriculture Research Institute	(ZARDI)		
Budget Output 010008 Capacity Strengthening			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	5	1
Number of improved technologies and innovations adopted	Number	7	0
Number of markets created along product lines	Number	2	0
Number of research products and services for food and nutrition security generated	Number	4	0
Number of research products and services suitable for industry developed	Number	2	0
Department:006 Nabuin Zonal Agriculture Research Institute(Z	ZARDI)		
Budget Output 010011 Technology Promotion			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	6	0
Number of functional public-private partnerships established for technology development and promotion	Number	3	1
Number of improved technologies and innovations adopted	Number	14	0
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

# VOTE: 142 National Agricultural Research Organization (NARO)

developed

Programme:01 AGRO-INDUSTRIALIZATION			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:007 NARO-SECRETARIATE			
Budget Output 010008 Capacity Strengthening			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1
Number of functional public-private partnerships established for technology development and promotion	Number	14	4
Number of research products and services for food and nutrition security generated	Number	15	0
Department:008 National Agricultural Research Laboratories			
Budget Output 010008 Capacity Strengthening			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	4	1
Number of functional public-private partnerships established for technology development and promotion	Number	4	1
Number of improved technologies and innovations adopted	Number	4	0
Number of research products and services for food and nutrition security generated	Number	6	1
Number of research products and services suitable for industry developed	Number	8	0
Department:009 National Coffee Research Institute			
Budget Output 010008 Capacity Strengthening			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	6	0
Number of improved technologies and innovations adopted	Number	3	0
Number of market responsive coffee varities developed	Number	3	0
Number of research products and services for food and nutrition security generated	Number	3	0
Number of research products and services suitable for industry	Number	6	2

## **VOTE:** 142 National Agricultural Research Organization (NARO)

Programme:01 AGRO-INDUSTRIALIZATION			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:010 National Crops Resources Research Institute			
Budget Output 010008 Capacity Strengthening			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	10	2
Number of functional public-private partnerships established for technology development and promotion	Number	12	1
Number of improved technologies and innovations adopted	Number	19	0
Number of markets created along product lines	Number	3	0
Number of research products and services for food and nutrition security generated	Number	12	0
Number of research products and services suitable for industry developed	Number	5	1
Budget Output 010011 Technology Promotion			
PIAP Output 01040706 Research-extension farmer linkages deve	eloped and strengthened	i	
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1
Number of technologies adopted	Number	5	1
Department:011 National Fisheries Resources Research Institute			
Budget Output 010010 Technology Generation			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	5	0
Number of functional public-private partnerships established for technology development and promotion	Number	3	0
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	1
Number of research products and services suitable for industry developed	Number	3	1

#### **VOTE:** 142 National Agricultural Research Organization (NARO)

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Programme:01	AGRO-	-INDUSTR	IALIZATION

SubProgramme:02 Agricultural Production and Productivity

Sub SubProgramme:01 Agricultural Research

#### **Department:012 National Forestry Resources Research Institute**

Budget Output 010010 Technology Generation

#### PIAP Output 01040705 Demand driven agriculture technologies developed

PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	3	0
Number of functional public-private partnerships established for technology development and promotion	Number	2	1
Number of improved technologies and innovations adopted	Number	2	1
Number of research products and services for food and nutrition security generated	Number	2	0
Number of research products and services suitable for industry developed	Number	2	0

#### Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)

Budget Output 010010 Technology Generation

#### PIAP Output 01040705 Demand driven agriculture technologies developed

PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	2	2
Number of functional public-private partnerships established for technology development and promotion	Number	5	1
Number of improved technologies and innovations adopted	Number	2	2
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

PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	1	0
Number of functional public-private partnerships established for technology development and promotion	Number	1	0
Number of improved technologies and innovations adopted	Number	1	0

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Programme:01 AGRO-INDUSTRIALIZATION			
SubProgramme:02 Agricultural Production and Productivity			
Sub SubProgramme:01 Agricultural Research			
Department:014 National Livestock Resources Research Institut	e (NaLIRRI)		
Budget Output 010010 Technology Generation			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1
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	0
Department:015 National Semi Arid Resources Research Institut	e (NaSARRI)		
Budget Output 010010 Technology Generation			
PIAP Output 01040705 Demand driven agriculture technologies	developed		
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	2	1
Number of functional public-private partnerships established for technology development and promotion	Number	3	1
Number of improved cotton varieties developed	Number	3	0
*	Number Number	3	0
Number of improved technologies and innovations adopted			0 1 0
Number of improved technologies and innovations adopted Number of markets created along product lines Number of research products and services for food and nutrition	Number	3	1
Number of improved technologies and innovations adopted  Number of markets created along product lines  Number of research products and services for food and nutrition security generated  Number of research products and services suitable for industry	Number Number	3	1 0
Number of improved technologies and innovations adopted Number of markets created along product lines Number of research products and services for food and nutrition security generated Number of research products and services suitable for industry developed	Number Number Number	3 3 8	1 0
Number of improved technologies and innovations adopted Number of markets created along product lines Number of research products and services for food and nutrition security generated Number of research products and services suitable for industry developed Budget Output 010011 Technology Promotion	Number Number Number Number	3 3 8	1 0
Number of improved cotton varieties developed  Number of improved technologies and innovations adopted  Number of markets created along product lines  Number of research products and services for food and nutrition security generated  Number of research products and services suitable for industry developed  Budget Output 010011 Technology Promotion  PIAP Output 01040705 Demand driven agriculture technologies  PIAP Output Indicators	Number Number Number Number	3 3 8 6	1 0

#### **VOTE:** 142 National Agricultural Research Organization (NARO)

Quarter 1

Programme:01 AGRO-INDUSTRI	IALIZATION
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SubProgramme:02 Agricultural Production and Productivity

Sub SubProgramme:01 Agricultural Research

#### Department:016 Ngetta ZARDI

Budget Output 010010 Technology Generation

#### PIAP Output 01040705 Demand driven agriculture technologies developed

PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
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	0
Number of research products and services for food and nutrition security generated	Number	3	0

#### Department:017 Rwebitaba ZARDI

Budget Output 010010 Technology Generation

#### PIAP Output 01040705 Demand driven agriculture technologies developed

PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of market-oriented products generated	Number	4	0
Number of functional public-private partnerships established for technology development and promotion	Number	18	0
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	0
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

PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1
Number of research products and services suitable for industry	Number	13	0
developed			

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Programme:01 AGRO-INDUSTRIALIZATION						
SubProgramme:02 Agricultural Production and Productivity						
Sub SubProgramme:01 Agricultural Research						
Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)						
Budget Output 010010 Technology Generation						
PIAP Output 01040705 Demand driven agriculture technologies developed						
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1			
Number of research products and services suitable for industry developed	Number	13	1			
Project:1619 Retooling of National Agricultural Research Organiz	zation					
Budget Output 000003 Facilities and Equipment Management						
PIAP Output 01040705 Demand driven agriculture technologies d	eveloped					
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1			
Number of research products and services for food and nutrition security generated	Number	10	1			
Budget Output 010008 Capacity Strengthening						
PIAP Output 01040705 Demand driven agriculture technologies d	eveloped					
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1			
Number of market-oriented products generated	Number	6	0			
Budget Output 010009 Research Partnerships						
PIAP Output 01040705 Demand driven agriculture technologies d	eveloped					
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1			
Number of functional public-private partnerships established for technology development and promotion	Number	12	0			
Budget Output 010010 Technology Generation						
PIAP Output 01040705 Demand driven agriculture technologies d	eveloped					
PIAP Output Indicators	<b>Indicator Measure</b>	Planned 2022/23	Actuals By END Q 1			
Number of research products and services suitable for industry developed	Number	10	0			
Budget Output 010011 Technology Promotion						
PIAP Output 01040705 Demand driven agriculture technologies d	eveloped					
PIAP Output Indicators	Indicator Measure	Planned 2022/23	Actuals By END Q 1			
Number of improved technologies and innovations adopted	Number	36	0			

#### VOTE: 142 National Agricultural Research Organization (NARO)

**Quarter 1** 

#### Performance highlights for the Quarter

Even with a constrained resource envelop, NARO was able to conduct and launch On-farm anti-tick vacine trials in Mbarara. MBrara ZARDI was the launching pad.

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 is mandated to produce seed for maize and beans and it undertaking this at two sites, NaCRRI –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 management activities is at the standard of foundation seed. Total acreage planted is 205 acres. Summary of total acreage per variety planted is Total acreage for Seso1=05; Total acreage for Narosorg1=05; Total acreage for Narosorg2 = 145

In mid-western Uganda, At Bulindi ZARDI NARO, is actively participating in production of foundation seeds of Soybeans, beans and Maize within the Albert Crescent Zone to increase access to seed of these commodities. Total acreage planted is 157

#### Matters to note in budget execution

The vote (142) MTEF for FY 2022/23 shows a slight increase in budget allocation to NARO by the Government (UGX 117.783bn Vs. UGX 110.605bn). This is attributed to the enhanced MTEF for GoU Wage Recurrent to enhance salaries for research scientists. NARO was front loaded a budget of UGX10bn off her retooling budget to urgently contribute toward the national strategic seed intervention for food and feed. Cabinet had earlier declared this amount as a supplementary budget, however Ministry of Finance Planning and Economic Development has prononced itself that the amounts therein are beyond the statutory 3% of the budget. Activities for FY 2022/23 Work plan have been delayed due to this front loading. Some of which include

- a) Competitive Research Grants scheme funds to the institutes (CGS),
- b) Anti-tick vaccine geographical trials
- c) Equipping of the Aflasafe facility and Laboratory as well as the Tea Research Laboratory in Rwebitaba,
- d) Research on Avocado, Anona, Macadamia, Cashew nut, Olives, and Grapes,
- e) Research on accelerated breeding to develop competitive farmer and market-preferred varieties/breeds,
- f) Sustainable management of pests, vectors, and diseases (health, and management),
- g) Production of early generation seed for crops, fish, and livestock.
- h) Motor Vehicles to revamp the old fleet that can no longer support research activities.

The development budget was at 0% of the annual budget. While for Off budget funding there has also generally declined.

# VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

#### V3: Details of Releases and Expenditure

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

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
Programme:01 AGRO-INDUSTRIALIZATION	116.927	117.927	27.143	22.524	23.2 %	19.3 %	83.0 %
Sub SubProgramme:01 Agricultural Research	116.927	117.927	27.143	22.524	23.2 %	19.3 %	83.0 %
000001 Audit and Risk Management	0.121	0.121	0.030	0.029	24.9 %	24.0 %	96.7 %
000003 Facilities and Equipment Management	17.270	17.270	0.000	0.000	0.0 %	0.0 %	0.0 %
000014 Administrative and Support Services	54.546	55.546	14.374	13.917	26.4 %	25.5 %	96.8 %
000017 Infrastructure Development and Management	5.719	5.719	0.000	0.000	0.0 %	0.0 %	0.0 %
010008 Capacity Strengthening	20.433	20.433	5.732	3.390	28.1 %	16.6 %	59.1 %
010009 Research Partnerships	1.800	1.800	0.000	0.000	0.0 %	0.0 %	0.0 %
010010 Technology Generation	11.698	11.698	4.390	3.415	37.5 %	29.2 %	77.8 %
010011 Technology Promotion	5.341	5.341	2.617	1.773	49.0 %	33.2 %	67.7 %
Total for the Vote	116.927	117.927	27.143	22.524	23.2 %	19.3 %	83.0 %

# VOTE: 142 National Agricultural Research Organization (NARO)

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

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
211102 Contract Staff Salaries	38.811	39.811	9.953	9.703	25.6 %	25.0 %	97.5 %
211104 Employee Gratuity	9.703	9.703	2.426	2.426	25.0 %	25.0 %	100.0 %
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	1.978	1.978	0.223	0.119	11.3 %	6.0 %	53.4 %
211107 Boards, Committees and Council Allowances	0.762	0.762	0.014	0.014	1.8 %	1.8 %	100.0 %
212101 Social Security Contributions	3.881	3.881	0.970	0.970	25.0 %	25.0 %	100.0 %
212102 Medical expenses (Employees)	0.850	0.850	0.700	0.648	82.4 %	76.2 %	92.6 %
212103 Incapacity benefits (Employees)	0.635	0.635	0.159	0.106	25.0 %	16.7 %	66.7 %
221001 Advertising and Public Relations	0.411	0.411	0.014	0.014	3.4 %	3.4 %	100.0 %
221003 Staff Training	1.009	1.009	0.016	0.015	1.6 %	1.5 %	93.8 %
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	0.007	0.007	14.5 %	14.5 %	100.0 %
221008 Information and Communication Technology Supplies.	0.357	0.357	0.028	0.028	7.9 %	7.9 %	100.0 %
221009 Welfare and Entertainment	0.407	0.407	0.044	0.043	10.8 %	10.6 %	97.7 %
221011 Printing, Stationery, Photocopying and Binding	0.539	0.539	0.042	0.030	7.8 %	5.6 %	71.4 %
221012 Small Office Equipment	0.050	0.050	0.010	0.009	20.1 %	18.1 %	90.0 %
221016 Systems Recurrent costs	0.030	0.030	0.000	0.000	0.0 %	0.0 %	0.0 %
221017 Membership dues and Subscription fees.	0.066	0.066	0.006	0.006	9.1 %	9.1 %	100.0 %
222001 Information and Communication Technology Services.	0.415	0.415	0.042	0.036	10.1 %	8.7 %	85.7 %
222002 Postage and Courier	0.040	0.040	0.004	0.004	10.0 %	10.0 %	100.0 %
223001 Property Management Expenses	0.142	0.142	0.035	0.032	24.6 %	22.5 %	91.4 %
223002 Property Rates	0.034	0.034	0.001	0.001	2.9 %	2.9 %	100.0 %
223004 Guard and Security services	0.299	0.299	0.064	0.062	21.4 %	20.7 %	96.9 %
223005 Electricity	0.277	0.277	0.059	0.053	21.3 %	19.1 %	89.8 %
223006 Water	0.090	0.090	0.022	0.020	24.4 %	22.2 %	90.9 %
224001 Medical Supplies and Services	0.040	0.040	0.010	0.010	25.0 %	25.0 %	100.0 %
224002 Veterinary supplies and services	0.162	0.162	0.017	0.017	10.5 %	10.5 %	100.0 %

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
224003 Agricultural Supplies and Services	3.532	3.532	2.140	1.565	60.6 %	44.3 %	73.1 %
224004 Beddings, Clothing, Footwear and related Services	0.081	0.081	0.016	0.009	19.7 %	11.1 %	56.3 %
224005 Laboratory supplies and services	1.763	1.763	0.005	0.005	0.3 %	0.3 %	100.0 %
224010 Protective Gear	0.018	0.018	0.002	0.002	11.1 %	11.1 %	100.0 %
224011 Research Expenses	14.827	14.827	9.583	6.069	64.6 %	40.9 %	63.3 %
225101 Consultancy Services	0.509	0.509	0.001	0.001	0.2 %	0.2 %	100.0 %
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	0.000	0.000	0.0 %	0.0 %	0.0 %
225204 Monitoring and Supervision of capital work	0.466	0.466	0.000	0.000	0.0 %	0.0 %	0.0 %
226001 Insurances	0.077	0.077	0.018	0.002	23.4 %	2.6 %	11.1 %
226002 Licenses	0.098	0.098	0.002	0.002	2.0 %	2.0 %	100.0 %
227001 Travel inland	0.747	0.747	0.010	0.010	1.3 %	1.3 %	100.0 %
227003 Carriage, Haulage, Freight and transport hire	0.019	0.019	0.000	0.000	0.0 %	0.0 %	0.0 %
227004 Fuel, Lubricants and Oils	1.244	1.244	0.154	0.154	12.4 %	12.4 %	100.0 %
228001 Maintenance-Buildings and Structures	6.319	6.319	0.073	0.070	1.2 %	1.1 %	95.9 %
228002 Maintenance-Transport Equipment	0.581	0.581	0.080	0.075	13.8 %	12.9 %	93.8 %
228003 Maintenance-Machinery & Equipment Other than Transport Equipment	0.374	0.374	0.032	0.029	8.6 %	7.8 %	90.6 %
228004 Maintenance-Other Fixed Assets	0.125	0.125	0.013	0.010	10.4 %	8.0 %	76.9 %
262201 Contributions to International Organisations- Capital	1.785	1.785	0.000	0.000	0.0 %	0.0 %	0.0 %
273102 Incapacity, death benefits and funeral expenses	0.017	0.017	0.004	0.004	22.9 %	22.9 %	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	0.000	0.000	0.0 %	0.0 %	0.0 %
312139 Other Structures - Acquisition	0.862	0.862	0.000	0.000	0.0 %	0.0 %	0.0 %
312212 Light Vehicles - Acquisition	5.981	5.981	0.000	0.000	0.0 %	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 %

## VOTE: 142 National Agricultural Research Organization (NARO)

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
312232 Electrical machinery - Acquisition	0.025	0.025	0.000	0.000	0.0 %	0.0 %	0.0 %
312233 Medical, Laboratory and Research & appliances - Acquisition	10.555	10.555	0.000	0.000	0.0 %	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	100.2 %	100.2 %	100.0 %
Total for the Vote	116.927	117.927	27.143	22.524	23.2 %	19.3 %	83.0 %

### **VOTE:** 142 National Agricultural Research Organization (NARO)

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

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
Programme:01 AGRO-INDUSTRIALIZATION	116.927	117.927	27.143	22.525	23.21 %	19.26 %	82.99 %
Sub SubProgramme:01 Agricultural Research	116.927	117.927	27.143	22.525	23.21 %	19.26 %	83.0 %
Departments	1						
001 Abi Zonal Agriculture Research Institute(ZARDI)	0.117	0.117	0.029	0.029	24.9 %	24.9 %	100.0 %
002 Buginyaya Zonal Agriculture Research Institute(ZARDI)	0.272	0.272	0.067	0.067	24.6 %	24.6 %	100.0 %
003 Bulindi Zonal Agriculture Research Institute(ZARDI)	0.139	0.139	0.042	0.042	30.2 %	30.2 %	100.0 %
004 Kachwekano Zonal Agriculture Research Institute(ZARDI)	0.214	0.214	0.048	0.048	22.4 %	22.4 %	100.0 %
005 Mbarara Zonal Agriculture Research Institute(ZARDI)	0.117	0.117	0.029	0.029	24.8 %	24.8 %	100.0 %
006 Nabuin Zonal Agriculture Research Institute(ZARDI)	0.117	0.117	0.029	0.029	24.8 %	24.8 %	100.0 %
007 NARO-SECRETARIATE	64.993	65.993	16.304	15.185	25.1 %	23.4 %	93.1 %
008 National Agricultural Research Laboratories	0.300	0.300	0.075	0.075	25.0 %	25.0 %	100.0 %
009 National Coffee Research Institute	0.197	0.197	0.049	0.049	24.8 %	24.8 %	100.0 %
010 National Crops Resources Research Institute	0.247	0.247	0.062	0.062	25.1 %	25.1 %	100.0 %
011 National Fisheries Resources Research Institute	0.197	0.197	0.049	0.049	24.8 %	24.8 %	100.0 %
012 National Forestry Resources Research Institute	0.125	0.125	0.031	0.031	24.8 %	24.8 %	100.0 %
013 Mukono Zonal Agriculture Research Institute (ZARDI)	0.264	0.264	0.066	0.066	25.0 %	25.0 %	100.0 %
014 National Livestock Resources Research Institute (NaLIRRI)	0.622	0.622	0.156	0.156	25.1 %	25.1 %	100.0 %
015 National Semi Arid Resources Research Institute (NaSARRI)	0.122	0.122	0.031	0.031	25.4 %	25.4 %	100.0 %
016 Ngetta ZARDI	0.117	0.117	0.029	0.029	24.9 %	24.9 %	100.0 %
017 Rwebitaba ZARDI	0.192	0.192	0.047	0.047	24.5 %	24.5 %	100.0 %
Development Projects							
1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI)	7.719	7.719	0.000	0.000	0.0 %	0.0 %	0.0 %

## **VOTE:** 142 National Agricultural Research Organization (NARO)

Billion Uganda Shillings	Approved Budget	Revised Budget	Released by End Q1	Spent by End Q1	% GoU Budget Released	% GoU Budget Spent	% GoU Releases Spent
Programme:01 AGRO-INDUSTRIALIZATION	116.927	117.927	27.143	22.525	23.21 %	19.26 %	82.99 %
1619 Retooling of National Agricultural Research Organization	40.856	40.856	10.000	6.502	24.5 %	15.9 %	65.0 %
Total for the Vote	116.927	117.927	27.143	22.525	23.2 %	19.3 %	83.0 %

**VOTE:** 142 National Agricultural Research Organization (NARO)

Quarter 1

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

#### VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

#### **Quarter 1: 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 Coo	ordination	
Sub SubProgramme:01 Agricultural Research		
Departments		
Department:007 NARO-SECRETARIATE		
Budget Output:000001 Audit and Risk Management		
PIAP Output: 01040701 Demand driven agriculture tec	hnologies developed	
3 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.	Three audit reports one each for risk, value for money, NARO assets management, human resource management,	NA
Expenditures incurred in the Quarter to deliver outputs	S	UShs Thousand
Item		Spen
221003 Staff Training		8,600.000
224011 Research Expenses		20,846.500
	Total For Budget Output	29,446.500
	Wage Recurrent	0.000
	Non Wage Recurrent	29,446.500
	Arrears	0.000
	AIA	0.000
<b>Budget Output:000014 Administrative and Support Ser</b>	vices	
PIAP Output: 01040701 Demand driven agriculture tec	hnologies developed	
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	Partnerships 1) Initiated a potential partnership with Uganda Industrial Research institute on incubation. 2) Conducted a monitoring visit to the Nile Breweries Limited fields. 3) An inception workshop for the development of a NARO partnership policy held and road map drawn to guide next task force.	NA

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deli</b>	ver outputs	UShs Thousand
Item		Spent
211102 Contract Staff Salaries		9,702,777.318
211104 Employee Gratuity		2,425,694.330
211106 Allowances (Incl. Casuals, Temporary,	sitting allowances)	50,156.500
212101 Social Security Contributions		970,277.709
212102 Medical expenses (Employees)		648,260.000
212103 Incapacity benefits (Employees)		101,391.600
221009 Welfare and Entertainment		18,850.001
	Total For Budget Output	13,917,407.458
	Wage Recurrent	9,702,777.318
	Non Wage Recurrent	4,214,630.140
	Arrears	0.000
	AIA	0.000
	<b>Total For Department</b>	13,946,853.958
	Wage Recurrent	9,702,777.318
	Non Wage Recurrent	4,244,076.640
	Arrears	0.000
	AIA	0.000
Develoment Projects		
N/A		
SubProgramme:02 Agricultural Production	and Productivity	
Sub SubProgramme:01 Agricultural Researc	•	
Departments		
Department:001 Abi Zonal Agriculture Rese	arch Institute(ZARDI)	
Budget Output:010010 Technology Generation	on	
PIAP Output: 01040705 Demand driven agri	culture technologies developed	
one feed product	2% of the required Ingredients assembled.	No funds released for this activity.
PIAP Output: 01040706 Research-extension	farmer linkages developed and strengthened	·
one feed product	NA	NA

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040706 Research-extension farmer links	ages developed and strengthened	
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	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
224011 Research Expenses		9,170.000
	Total For Budget Output	9,170.000
	Wage Recurrent	0.000
	Non Wage Recurrent	9,170.000
	Arrears	0.000
	AIA	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture tech	nologies developed	
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	Two internal consultative meetings held at the institute.	
PIAP Output: 01040706 Research-extension farmer linka	l nges developed and strengthened	
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 varity promoted	Maintained the mother gardens for citrus, avocado, mango,	No funds were released.
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
221008 Information and Communication Technology Suppli	es.	125.000
221011 Printing, Stationery, Photocopying and Binding		3,392.500
222001 Information and Communication Technology Service	es.	93.750
224003 Agricultural Supplies and Services		5,000.000
224011 Research Expenses		10,030.000
227004 Fuel, Lubricants and Oils		1,358.750
	Total For Budget Output	20,000.000

## **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Wage Recurrent	0.000
	Non Wage Recurrent	20,000.000
	Arrears	0.000
	AIA	0.000
	Total For Department	29,170.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,170.000
	Arrears	0.000
	AIA	0.000
Department:002 Buginyaya Zonal Agriculture Research	h Institute(ZARDI)	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tec	hnologies developed	
1 partnership promoted for technology generation 1 research products commercialized 1 research platform established	Knowledge on research areas and designs for several disciplines, collaborative and partnership research documented.	Meagre funding limited visit to more partners in Bugisu sub zone
Expenditures incurred in the Quarter to deliver outputs	S	UShs Thousand
Expenditures incurred in the Quarter to deliver outputs  Item	S	UShs Thousand Spent
	s	Spent
Item	s ·	Spent
Item 211107 Boards, Committees and Council Allowances	S	Spent 1,435.000
Item 211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees)	S Company of the comp	Spent 1,435.000 441.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations		Spent 1,435.000 441.000 1,304.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers		Spent 1,435.000 441.000 1,304.000 339.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp		Spent 1,435.000 441.000 1,304.000 339.000 1,565.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment		Spent 1,435.000 441.000 1,304.000 339.000 1,565.000 300.000 1,318.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding	olies.	Spent 1,435.000 441.000 1,304.000 339.000 1,565.000 300.000 1,318.000 522.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment	olies.	Spent 1,435.000 441.000 1,304.000 339.000 1,565.000 300.000 1,318.000 522.000 5,609.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Information and Communication Technology Services	olies.	Spent  1,435.000  441.000  1,304.000  339.000  1,565.000  300.000  1,318.000  522.000  5,609.000  782.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Information and Communication Technology Servi 223001 Property Management Expenses	olies.	\$pent  1,435.000  441.000  1,304.000  339.000  1,565.000  300.000  1,318.000  522.000  5,609.000  782.000  3,261.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Information and Communication Technology Servi 223001 Property Management Expenses 223004 Guard and Security services	olies.	\$pent  1,435.000  441.000  1,304.000  339.000  1,565.000  300.000  1,318.000  522.000  5,609.000  782.000  3,261.000  1,044.000
Item  211107 Boards, Committees and Council Allowances 212103 Incapacity benefits (Employees) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Information and Communication Technology Supp 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Information and Communication Technology Servi 223001 Property Management Expenses 223004 Guard and Security services 223005 Electricity	olies.	Spent 1,435.000 441.000 1,304.000 339.000 1,565.000 300.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
227004 Fuel, Lubricants and Oils		1,305.000
228001 Maintenance-Buildings and Structures		652.000
228002 Maintenance-Transport Equipment		5,300.000
228003 Maintenance-Machinery & Equipment Other than T	ransport Equipment	1,305.000
228004 Maintenance-Other Fixed Assets		652.000
	Total For Budget Output	32,613.000
	Wage Recurrent	0.000
	Non Wage Recurrent	32,613.000
	Arrears	0.000
	AIA	0.000
<b>Budget Output:010010 Technology Generation</b>		
PIAP Output: 01040705 Demand driven agriculture tech	nologies developed	
1 Industrial products for yield improvement and commercialization developed for industry	Fertilizer blends trials for maize, coffee and potato have been harvest and samples are being processed for final yield data collection	NA
1 variety with adequate resistance to major pests and diseases developed to support house food security and incomes	NA	No funds were released for this activity
PIAP Output: 01040706 Research-extension farmer linka	 ages developed and strengthened	
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	4 promising candidate wheat varieties at NPT have been planted in Bukwo, Kween, Bulambuli and at 3 leaf stage; 5 promising maize hybrids namely Q150114, Q160138, Q444614, Q160121 & Q160114 at DUS.  1.5 acres of potato EGS in was established the field on station and is ready for dehauming and harvest; 4, 000 Apical rooted cuttings of potato in the screenhouse are at flowering stage.  15 promising elite wheat lines at ATY at multiple locations in Suam, Kwosir, Bulegeni, Buginyanya, and Kalengyere.	NA

## **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
221011 Printing, Stationery, Photocopying and Binding		775.250
221012 Small Office Equipment		267.500
224002 Veterinary supplies and services		250.000
224003 Agricultural Supplies and Services		2,150.000
224011 Research Expenses		2,300.000
227004 Fuel, Lubricants and Oils		900.000
228002 Maintenance-Transport Equipment		300.000
	Total For Budget Output	6,942.750
	Wage Recurrent	0.000
	Non Wage Recurrent	6,942.750
	Arrears	0.000
	AIA	0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture tecl	hnologies developed	
2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted	NA	Inadequate release of resources affected research activities. Work still ongoing
1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes	NA	NA
PIAP Output: 01040706 Research-extension farmer link	ages developed and strengthened	
2 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies	NA	NA
Expenditures incurred in the Quarter to deliver outputs		UShs Thousand
Item		Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allow	vances)	2,174.000
211107 Boards, Committees and Council Allowances		957.000
212103 Incapacity benefits (Employees)		348.000
221001 Advertising and Public Relations		870.000
221007 Books, Periodicals & Newspapers		226.000

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to del	liver outputs	UShs Thousand
Item		Spent
221008 Information and Communication Tech	nology Supplies.	1,044.000
221009 Welfare and Entertainment		200.000
221011 Printing, Stationery, Photocopying and	Binding	1,355.000
221012 Small Office Equipment		348.000
222001 Information and Communication Tech	nology Services.	3,740.000
223001 Property Management Expenses		521.000
223004 Guard and Security services		2,173.000
223005 Electricity		696.000
223006 Water		521.000
224002 Veterinary supplies and services		698.250
224003 Agricultural Supplies and Services		1,413.000
224011 Research Expenses		3,685.000
226001 Insurances		87.000
227004 Fuel, Lubricants and Oils		870.000
228001 Maintenance-Buildings and Structures		435.000
228002 Maintenance-Transport Equipment		3,479.000
228003 Maintenance-Machinery & Equipmen	t Other than Transport Equipment	870.000
228004 Maintenance-Other Fixed Assets		434.000
	Total For Budget Output	27,144.250
	Wage Recurrent	0.000
	Non Wage Recurrent	27,144.250
	Arrears	0.000
	AIA	0.000
	Total For Department	66,700.000
	Wage Recurrent	0.000
	Non Wage Recurrent	66,700.000
	Arrears	0.000
	AIA	0.000
Department:003 Bulindi Zonal Agriculture	Research Institute(ZARDI)	
Budget Output:010010 Technology Generat	ion	

## **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture tech	nologies developed	
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	Sourced for Soya and rice seed for the msip. Initiated contact with the msip partners.	NA
NA	-	No funding received to open up land and purchase inputs.
PIAP Output: 01040706 Research-extension farmer links	ages developed and strengthened	
Quality seed for 1 improved priority crop Varieties multiplied and isseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed	1) 50 bags of cassava cuttings ready for uptake, 2) 50 kgs, 2.75 tons and 0.5 tons of Chloris gayana, Sugar napier and Brachiaria mulato respectivley produced for farmers in the zone	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		1,787.143
221007 Books, Periodicals & Newspapers		595.714
221008 Information and Communication Technology Suppli	ies.	1,489.286
221009 Welfare and Entertainment		1,787.143
221011 Printing, Stationery, Photocopying and Binding		1,787.143
221012 Small Office Equipment		893.571
221017 Membership dues and Subscription fees.		595.714
222002 Postage and Courier		297.857
223001 Property Management Expenses		1,191.429
223004 Guard and Security services		2,978.571
224010 Protective Gear		595.714
224011 Research Expenses		21,445.714
228002 Maintenance-Transport Equipment		2,978.571
228003 Maintenance-Machinery & Equipment Other than T	ransport Equipment	2,382.857
273102 Incapacity, death benefits and funeral expenses		893.573
	Total For Budget Output	41,700.000
	Wage Recurrent	0.000
	Non Wage Recurrent	41,700.000
	Arrears	0.000

## VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	AIA	0.000
	Total For Department	41,700.000
	Wage Recurrent	0.000
	Non Wage Recurrent	41,700.000
	Arrears	0.000
	AIA	0.000
Department:004 Kachwekano Zonal Agriculture Resear	ch Institute(ZARDI)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
1 technologies promoted 1 technologies for food and nutrition security generated	4 bags of avocado planting purchased, 300 coffee seedling ordered from NaCORI; 424 Pears raised and grafted, and 2200 apple seedlings raised and grafted.	NA
2 Demand driven agriculture technologies developed and promoted	NA	NA
PIAP Output: 01040706 Research-extension farmer link	ages developed and strengthened	ı
2 Demand driven agriculture technologies developed and promoted	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
211107 Boards, Committees and Council Allowances		400.000
221008 Information and Communication Technology Supplies.		2,000.000
221009 Welfare and Entertainment		1,800.000
221012 Small Office Equipment		350.000
222001 Information and Communication Technology Services.		200.000
223001 Property Management Expenses		2,100.000
223004 Guard and Security services		10,079.000
223005 Electricity		800.000
223006 Water		750.000
224003 Agricultural Supplies and Services		6,002.000
224011 Research Expenses		11,743.600
226001 Insurances		292.500
227004 Fuel, Lubricants and Oils		4,031.400
228001 Maintenance-Buildings and Structures		5,001.500

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
228002 Maintenance-Transport Equipment		2,400.000
	Total For Budget Output	47,950.000
	Wage Recurrent	0.000
	Non Wage Recurrent	47,950.000
	Arrears	0.000
	AIA	0.000
	Total For Department	47,950.000
	Wage Recurrent	0.000
	Non Wage Recurrent	47,950.000
	Arrears	0.000
	AIA	0.000
Department:005 Mbarara Zonal Agriculture Research I	nstitute(ZARDI)	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
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	20 bags for dairy feed supplement 1 technologies generate for farmers.	d NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousana
Item		Spent
224002 Veterinary supplies and services		3,750.000
224003 Agricultural Supplies and Services		2,500.000
224011 Research Expenses		22,950.000
	Total For Budget Output	29,200.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,200.000
	Non Wage Recurrent Arrears	•
		0.000
	Arrears	29,200.000 0.000 0.000 <b>29,200.000</b>

## VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Non Wage Recurrent	29,200.000
	Arrears	0.000
	AIA	0.000
Department:006 Nabuin Zonal Agriculture Research Ins	stitute(ZARDI)	
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture tech	nologies developed	
1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers	Protocol for production of vegetable seeds, and biomass form utility determined	NA
1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers	8 acres of pasture seed maintained on-station (2 acres of Bracharia and 6 acres of Nappier grass).	NA
PIAP Output: 01040706 Research-extension farmer link	ages developed and strengthened	
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.	Maintained cattle on-station, 20 farmers trained in cattle health management and dry season feeding strategies.	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allowa	ances)	3,375.000
211107 Boards, Committees and Council Allowances		1,250.000
212103 Incapacity benefits (Employees)		375.000
221001 Advertising and Public Relations		500.000
221009 Welfare and Entertainment		475.000
221011 Printing, Stationery, Photocopying and Binding		1,411.000
222002 Postage and Courier		150.000
223001 Property Management Expenses		1,000.000
223004 Guard and Security services		1,500.000
223005 Electricity		1,125.000
		500.000
224002 Veterinary supplies and services		500.000
224002 Veterinary supplies and services 224003 Agricultural Supplies and Services		2,056.500

## **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
226001 Insurances		100.000
227004 Fuel, Lubricants and Oils		4,800.000
228001 Maintenance-Buildings and Structures		3,132.500
228002 Maintenance-Transport Equipment		3,750.000
228003 Maintenance-Machinery & Equipment Other than T	ransport Equipment	1,500.000
	Total For Budget Output	29,200.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,200.000
	Arrears	0.000
	AIA	0.000
	Total For Department	29,200.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,200.000
	Arrears	0.000
	AIA	0.000
Department:007 NARO-SECRETARIATE		
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tech	nnologies 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	Draft NARO work plans FY 2023/2024 compiled and ready for submission to NARO Council.  Impact assessment tools for the study developed. Study not conducted.	
	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allowa	ances)	63,777.500
211107 Boards, Committees and Council Allowances		10,294.000
221007 Books, Periodicals & Newspapers		1,743.000
221008 Information and Communication Technology Suppl	ies.	2,608.500
221009 Welfare and Entertainment		7,685.250

## VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver of	outputs	UShs Thousand
Item		Spent
221011 Printing, Stationery, Photocopying and Bind	ing	3,935.000
221012 Small Office Equipment		1,483.500
222001 Information and Communication Technolog	y Services.	11,335.250
222002 Postage and Courier		610.000
223001 Property Management Expenses		11,450.000
223004 Guard and Security services		11,406.250
223005 Electricity		9,360.250
223006 Water		4,392.500
224002 Veterinary supplies and services		9,420.500
224003 Agricultural Supplies and Services		54,673.250
224011 Research Expenses		755,278.057
226001 Insurances		106.250
227001 Travel inland		8,806.500
227004 Fuel, Lubricants and Oils		56,159.950
228001 Maintenance-Buildings and Structures		32,460.750
228002 Maintenance-Transport Equipment		26,499.560
228003 Maintenance-Machinery & Equipment Other	r than Transport Equipment	9,345.500
228004 Maintenance-Other Fixed Assets		1,166.249
352882 Utility Arrears Budgeting		143,762.518
	Total For Budget Output	1,237,760.084
	Wage Recurrent	0.000
	Non Wage Recurrent	1,093,997.566
	Arrears	143,762.518
	AIA	0.000
	Total For Department	1,237,760.084
	Wage Recurrent	0.000
	Non Wage Recurrent	1,093,997.566
	Arrears	143,762.518
	AIA	0.000
Department:008 National Agricultural Research	Laboratories	

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tec	hnologies developed	
1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize 1 Agriculture Research Innovations and IPs commercialized 1 research products and services for food and nutrition s	1) NARO PAH Safe Fish Smokking Kiln (NAROFIK 3) commercialized. 2) Design and working drawings of 1st prototype of low horsepower multi-crop motorised weeder.	NA
Expenditures incurred in the Quarter to deliver outputs	S	UShs Thousand
Item		Spent
221008 Information and Communication Technology Supp	lies.	3,000.000
221011 Printing, Stationery, Photocopying and Binding		4,900.000
222001 Information and Communication Technology Service	ices.	1,625.000
223001 Property Management Expenses		2,225.000
223004 Guard and Security services		2,750.000
223005 Electricity		4,750.000
223006 Water		2,950.000
224003 Agricultural Supplies and Services		6,250.000
224011 Research Expenses		33,550.000
226001 Insurances		575.000
227004 Fuel, Lubricants and Oils		5,200.000
228002 Maintenance-Transport Equipment		2,725.000
228003 Maintenance-Machinery & Equipment Other than	Transport Equipment	4,500.000
	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	75,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	75,000.000
	Arrears	0.000
	AIA	0.000
Department:009 National Coffee Research Institute		

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tecl	hnologies developed	
NA	NA	NA
PIAP Output: 0103020116 Functional public-private pa	rtnerships established for technology development and pro	omotion
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	Cocoa pulp wine and chocolate prototypes developed at NaCORI. These protypes require further profiling for their constituent contents and certification/quality market. Work still on-going.      Established Stakeholder preferences on coffee varieties in Northern Uganda. Work still on-going.      Two non- dietary coffee products refined for commercialization	Work still on-going.
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
221007 Books, Periodicals & Newspapers		387.325
221008 Information and Communication Technology Suppl	lies.	1,186.182
221009 Welfare and Entertainment		2,469.195
221011 Printing, Stationery, Photocopying and Binding		1,101.455
222002 Postage and Courier		242.078
223001 Property Management Expenses		1,077.247
223004 Guard and Security services		968.312
223005 Electricity		1,089.351
224003 Agricultural Supplies and Services		10,590.913
224010 Protective Gear		847.273
224011 Research Expenses		7,542.756
227004 Fuel, Lubricants and Oils		12,648.575
228001 Maintenance-Buildings and Structures		3,914.401
228002 Maintenance-Transport Equipment		2,178.702
228003 Maintenance-Machinery & Equipment Other than T	Transport Equipment	2,487.352
228004 Maintenance-Other Fixed Assets		121.039
273102 Incapacity, death benefits and funeral expenses		447.844
	Total For Budget Output	49,300.000
	Wage Recurrent	0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Non Wage Recurrent	49,300.000
	Arrears	0.000
	AIA	0.000
	Total For Department	49,300.000
	Wage Recurrent	0.000
	Non Wage Recurrent	49,300.000
	Arrears	0.000
	AIA	0.000
Department:010 National Crops Resources Research In	stitute	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tec	chnologies developed	
1 market-oriented products generated 5 research products and services suitable for industry developed	NA	NA
Expenditures incurred in the Quarter to deliver output	s	UShs Thousand
Item		Spent
221001 Advertising and Public Relations		4,250.000
221008 Information and Communication Technology Supp	olies.	750.000
221011 Printing, Stationery, Photocopying and Binding		1,250.000
222001 Information and Communication Technology Serv	ices.	750.000
223004 Guard and Security services		1,750.000
223005 Electricity		7,450.000
224005 Laboratory supplies and services		750.000
224011 Research Expenses		11,605.000
227004 Fuel, Lubricants and Oils		2,000.000
228001 Maintenance-Buildings and Structures		1,250.000
228002 Maintenance-Transport Equipment		4,000.000
228003 Maintenance-Machinery & Equipment Other than	Transport Equipment	1,000.000
	Total For Budget Output	36,805.000
	Wage Recurrent	0.000
	Non Wage Recurrent	36,805.000
	Arrears	0.000
	AIA	0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture tec	hnologies developed	
2 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways.	NA	NA
PIAP Output: 01040706 Research-extension farmer link	rages developed and strengthened	
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	d NA	NA
Expenditures incurred in the Quarter to deliver outputs		UShs Thousand
Item		Spen
221009 Welfare and Entertainment		875.000
224003 Agricultural Supplies and Services		5,000.000
224011 Research Expenses		19,125.000
	Total For Budget Output	25,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	25,000.000
	Arrears	0.000
	AIA	0.000
	Total For Department	61,805.000
	Wage Recurrent	0.000
	Non Wage Recurrent	61,805.000
	Arrears	0.000
	AIA	0.000
Department:011 National Fisheries Resources Research	Institute	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture tec	hnologies developed	
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	NA	NA

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		1,886.640
221007 Books, Periodicals & Newspapers		943.320
221008 Information and Communication Technology Suppl	lies.	786.100
221009 Welfare and Entertainment		1,493.590
221011 Printing, Stationery, Photocopying and Binding		1,336.370
222001 Information and Communication Technology Service	ces.	3,340.925
223004 Guard and Security services		2,358.300
223005 Electricity		1,965.250
223006 Water		1,965.250
224011 Research Expenses		10,062.180
227004 Fuel, Lubricants and Oils		2,947.875
228001 Maintenance-Buildings and Structures		5,974.360
228002 Maintenance-Transport Equipment		1,965.250
228003 Maintenance-Machinery & Equipment Other than 7	Transport Equipment	2,224.590
	Total For Budget Output	39,250.000
	Wage Recurrent	0.000
	Non Wage Recurrent	39,250.000
	Arrears	0.000
	AIA	0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture tecl	hnologies developed	
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) Maintained the freshwater biodiversity portal at: https://freshwaterbiodiversity.go.ug/ (ii) Published fish distribution maps from the national redlist assessments for 10 species	NA
PIAP Output: 01040706 Research-extension farmer link	ages developed and strengthened	
1 fish laboratory and 1 aquarium facilities maintained and operationalized, 1 cage research facility maintained and operationalized. 12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers)	NA	NA

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outpu	ts	UShs Thousand
Item		Spent
224003 Agricultural Supplies and Services		6,325.000
224011 Research Expenses		3,055.000
227004 Fuel, Lubricants and Oils		675.000
	Total For Budget Output	10,055.000
	Wage Recurrent	0.000
	Non Wage Recurrent	10,055.000
	Arrears	0.000
	AIA	0.000
	Total For Department	49,305.000
	Wage Recurrent	0.000
	Non Wage Recurrent	49,305.000
	Arrears	0.000
	AIA	0.000
Department:012 National Forestry Resources Research	h Institute	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture te	chnologies developed	
1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado of and seed powder from 10 varieties profiled	Hass for production of Hass avocado plantlets	NA
Expenditures incurred in the Quarter to deliver outpu	ts	UShs Thousand
Item		Spent
221009 Welfare and Entertainment		1,000.000
221011 Printing, Stationery, Photocopying and Binding		1,100.000
222001 Information and Communication Technology Serv	vices.	600.000
222002 Postage and Courier		100.000
223001 Property Management Expenses		2,000.000
223004 Guard and Security services		2,484.000
223005 Electricity		4,170.000
224010 Protective Gear		181.000

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
<b>Expenditures incurred in the Quarter to deliver outputs</b>	s .	UShs Thousana
Item		Spent
224011 Research Expenses		1,000.000
227004 Fuel, Lubricants and Oils		3,000.000
228001 Maintenance-Buildings and Structures		1,000.000
228002 Maintenance-Transport Equipment		2,000.000
228004 Maintenance-Other Fixed Assets		1,000.000
	Total For Budget Output	19,635.000
	Wage Recurrent	0.000
	Non Wage Recurrent	19,635.000
	Arrears	0.000
	AIA	0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture tech	hnologies developed	
27500 Hass Avocado seedlings produced and extended to famers.	35,000 clean rootstocks is being raised for grafting with Hass for production of Hass avocado plantlets.	NA
PIAP Output: 01040706 Research-extension farmer link	ages developed and strengthened	
3 shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding	16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI maintained	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousana
Item		Spent
221001 Advertising and Public Relations		1,082.479
221007 Books, Periodicals & Newspapers		324.744
222001 Information and Communication Technology Servi	ces.	2,164.958
224011 Research Expenses		8,042.819
	Total For Budget Output	11,615.000
	Wage Recurrent	0.000
	Non Wage Recurrent	11,615.000
	Arrears	0.000
	AIA	0.000
	Total For Department	31,250.000
	Wage Recurrent	0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Non Wage Recurrent	31,250.000
	Arrears	0.000
	AIA	0.000
Department:013 Mukono Zonal Agriculture Research I	Institute (ZARDI)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture tec	chnologies developed	
2 Value added products of tomato and pineapple developed and promoted	i NA	No funds received for this activity
Expenditures incurred in the Quarter to deliver output	s	UShs Thousand
Item		Spent
221011 Printing, Stationery, Photocopying and Binding		1,875.000
222001 Information and Communication Technology Serv	ices.	1,158.000
223004 Guard and Security services		6,000.000
223005 Electricity		5,250.000
223006 Water		850.000
224011 Research Expenses		8,634.000
227004 Fuel, Lubricants and Oils		1,575.000
	Total For Budget Output	25,342.000
	Wage Recurrent	0.000
	Non Wage Recurrent	25,342.000
	Arrears	0.000
	AIA	0.000
Budget Output:010011 Technology Promotion		

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced	1) Two coffee mother gardens at Mukono (1 acre) and Kamenyamiggo (1 acre) were maintained.	NA
	2) 8 acres of banana plantations were maintained at Mukono and Kamenyamiggo station.	
	2) 14,827 cuttings were carried forward from the previous quarter of which 10,997 coffee cuttings availed to uptake patheways and 3830 cuttings are still available and ready for sale; A total of 20,900 cuttings were potted and are still in the humid chambers	
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousana
Item		Spent
221001 Advertising and Public Relations		1,875.000
221009 Welfare and Entertainment		600.000
222001 Information and Communication Technology Service	ces.	2,648.500
223001 Property Management Expenses	2,593.000	
224011 Research Expenses		21,891.000
226001 Insurances		500.000
228001 Maintenance-Buildings and Structures		3,375.000
228002 Maintenance-Transport Equipment		3,500.000
228003 Maintenance-Machinery & Equipment Other than T	ransport Equipment	1,650.500
228004 Maintenance-Other Fixed Assets		500.000
273102 Incapacity, death benefits and funeral expenses		1,500.000
	Total For Budget Output	40,633.000
	Wage Recurrent	0.000
	Non Wage Recurrent	40,633.000
	Arrears	0.000
	AIA	0.000
	Total For Department	65,975.000
	Wage Recurrent	0.000
	Non Wage Recurrent	65,975.000
	Arrears	0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	AIA	0.000
Department:014 National Livestock Resources Research	ı Institute (NaLIRRI)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture tech	hnologies developed	
50 MT of conserved feed resources produced 50 Inbred line with different genetic back ground assembled 50 Samples for genotyping collected & processed	e NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousana
Item		Spent
221003 Staff Training		5,000.000
221008 Information and Communication Technology Supp	lies.	9,425.000
221009 Welfare and Entertainment		3,124.000
221011 Printing, Stationery, Photocopying and Binding		1,813.000
221012 Small Office Equipment		5,373.000
221017 Membership dues and Subscription fees.		5,507.000
222002 Postage and Courier		2,862.000
223001 Property Management Expenses		3,250.000
223002 Property Rates		1,124.500
223004 Guard and Security services		10,000.000
223005 Electricity		10,000.000
223006 Water		2,500.000
224001 Medical Supplies and Services		10,000.000
224002 Veterinary supplies and services		2,500.000
224003 Agricultural Supplies and Services		20,125.000
224004 Beddings, Clothing, Footwear and related Services		8,250.000
224005 Laboratory supplies and services		4,000.000
224011 Research Expenses		22,951.500
225101 Consultancy Services		750.000
226002 Licenses		1,750.000
227001 Travel inland		1,250.000
227004 Fuel, Lubricants and Oils		500.000
228001 Maintenance-Buildings and Structures		10,625.000
228002 Maintenance-Transport Equipment		7,875.000

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Expenditures incurred in the Quarter to deliver outpu	ts	UShs Thousan
Item		Spen
228004 Maintenance-Other Fixed Assets		5,000.00
	Total For Budget Output	155,555.00
	Wage Recurrent	0.00
	Non Wage Recurrent	155,555.00
	Arrears	0.00
	AIA	0.00
	Total For Department	155,555.00
	Wage Recurrent	0.00
	Non Wage Recurrent	155,555.00
	Arrears	0.00
	AIA	0.00
Department:015 National Semi Arid Resources Resear	rch Institute (NaSARRI)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture te	chnologies developed	
1 cotton line resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,	NA	This activity did not receive any funds.
Expenditures incurred in the Quarter to deliver outpu	ts	UShs Thousand
Item		Spen
24003 Agricultural Supplies and Services		832.50
224011 Research Expenses		3,885.00
227004 Fuel, Lubricants and Oils		555.00
228003 Maintenance-Machinery & Equipment Other than	n Transport Equipment	282.50
	Total For Budget Output	5,555.00
	Wage Recurrent	0.00
	Non Wage Recurrent	5,555.00
	Arrears	0.00
	AIA	0.00
Budget Output:010011 Technology Promotion		

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture tecl	nnologies developed	
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	205 acres of planted sorghum foundation seed.	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		750.000
221007 Books, Periodicals & Newspapers		1,250.000
221008 Information and Communication Technology Suppl	lies.	2,750.000
221009 Welfare and Entertainment		1,250.000
221011 Printing, Stationery, Photocopying and Binding		750.000
222001 Information and Communication Technology Service	ces.	500.000
223001 Property Management Expenses		1,000.000
223004 Guard and Security services		2,400.000
223005 Electricity		3,600.000
223006 Water		1,000.000
224011 Research Expenses		5,500.000
226001 Insurances		250.000
227004 Fuel, Lubricants and Oils		1,500.000
228002 Maintenance-Transport Equipment		1,500.000
273102 Incapacity, death benefits and funeral expenses		1,000.000
	Total For Budget Output	25,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	25,000.000
	Arrears	0.000
	AIA	0.000
	Total For Department	30,555.000
	Wage Recurrent	0.000
	Non Wage Recurrent	30,555.000
	Arrears	0.000
	AIA	0.000
Department:016 Ngetta ZARDI		

# **VOTE:** 142 National Agricultural Research Organization (NARO)

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 tech	nologies 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	<ol> <li>6 acres of groundnut, 6 acres of rice and 6 acres bean foundation seed plots established and maintained (first cycle).</li> <li>Data set on the survival rate, growth vigor of different grafting and propagating techniques in sheanut, tamarind and green heart tree (Warburgia Ugandensis) collected.</li> </ol>	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spen
212103 Incapacity benefits (Employees)		3,000.000
221011 Printing, Stationery, Photocopying and Binding		500.000
223006 Water		1,750.000
224003 Agricultural Supplies and Services		4,000.000
224011 Research Expenses		16,170.000
228001 Maintenance-Buildings and Structures		1,250.000
228002 Maintenance-Transport Equipment		1,250.000
228003 Maintenance-Machinery & Equipment Other than T	ransport Equipment	1,250.000
	Total For Budget Output	29,170.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,170.000
	Arrears	0.000
	AIA	0.000
	Total For Department	29,170.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,170.000
	Arrears	0.000
	AIA	0.000
Department:017 Rwebitaba ZARDI		
Budget Output:010010 Technology Generation		

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
PIAP Output: 01040705 Demand driven agriculture tec	chnologies developed	
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.	No funds for characterizing the biochemical attributes.
Expenditures incurred in the Quarter to deliver output	s	UShs Thousand
Item		Spent
221003 Staff Training		1,415.483
221007 Books, Periodicals & Newspapers		707.742
221008 Information and Communication Technology Supp	plies.	1,321.118
221009 Welfare and Entertainment		1,179.569
221011 Printing, Stationery, Photocopying and Binding		1,415.483
222001 Information and Communication Technology Serv	ices.	2,311.956
223001 Property Management Expenses		2,595.052
223004 Guard and Security services		2,076.042
223005 Electricity		1,415.483
223006 Water		2,830.966
224003 Agricultural Supplies and Services		2,807.375
224004 Beddings, Clothing, Footwear and related Services	S	943.655
224011 Research Expenses		15,623.394
226001 Insurances		283.097
227004 Fuel, Lubricants and Oils		4,010.535
228001 Maintenance-Buildings and Structures		1,179.569
228002 Maintenance-Transport Equipment		3,774.622
228004 Maintenance-Other Fixed Assets		1,509.849
	Total For Budget Output	47,400.990
	Wage Recurrent	0.000
	Non Wage Recurrent	47,400.990
	Arrears	0.000
	AIA	0.000
	Total For Department	47,400.990
	Wage Recurrent	0.000
	Non Wage Recurrent	47,400.990

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	Arrears	0.000
	AIA	0.000
Develoment Projects		
Project:1560 Relocation and Operationalisation of the Na	ational Livestock Resources Research Institute(NALIRRI	
<b>Budget Output:000017 Infrastructure Development and</b>	Management	
PIAP Output: 01040705 Demand driven agriculture tech	nologies developed	
1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	NA	NA
1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed.	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
	Total For Budget Output	0.000
	GoU Development	0.000
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
<b>Budget Output:010010 Technology Generation</b>		
PIAP Output: 01040705 Demand driven agriculture tech	nologies developed	
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 crosess	NA	NA
PIAP Output: 01040706 Research-extension farmer links	ages developed and strengthened	
1 Community Constraint Diagnostic Study Conducted	NA	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	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousana

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Project:1560 Relocation and Operationalisation of the N	ational Livestock Resources Research Instit	cute(NALIRRI)
Item		Spen
	Total For Budget Output	0.000
	GoU Development	0.000
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
	Total For Project	0.000
	GoU Development	0.000
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
Project:1619 Retooling of National Agricultural Researc	ch Organization	
<b>Budget Output:000003 Facilities and Equipment Manag</b>	gement	
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
4 research laboratories equipped and supplied with consumables to support research. seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation	NA	NA
NA	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spen
	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		

### VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Project:1619 Retooling of National Agricultural Research	h Organization	
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
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	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
224011 Research Expenses		1,820,525.500
227004 Fuel, Lubricants and Oils		49,796.400
	Total For Budget Output	1,870,321.900
	GoU Development	1,870,321.900
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
Budget Output:010009 Research Partnerships		
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
NNARO annual subscription to 1 international research organizations maintained	NA	NA
<b>Expenditures incurred in the Quarter to deliver outputs</b>		UShs Thousand
Item		Spent
	Total For Budget Output	0.000
	GoU Development	0.000
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
<b>Budget Output:010010 Technology Generation</b>		
PIAP Output: 01040705 Demand driven agriculture tech	nnologies developed	
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	NA	NA

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
Project:1619 Retooling of National Agricultural Resea	rch Organization	
Expenditures incurred in the Quarter to deliver output	its	UShs Thousand
Item		Spent
224003 Agricultural Supplies and Services		976,740.000
224011 Research Expenses		2,048,060.000
	Total For Budget Output	3,024,800.000
	GoU Development	3,024,800.000
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
<b>Budget Output:010011 Technology Promotion</b>		
PIAP Output: 01040705 Demand driven agriculture to	echnologies developed	
1 agricultural research innovations and IPs commercialize 1multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-	ed, NA	NA
Private Partnerships established for for technology development and promotion		
	nts	UShs Thousand
development and promotion	its	
Expenditures incurred in the Quarter to deliver output	ats	Spent
Expenditures incurred in the Quarter to deliver output  Item	ats	Spent 459,000.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output	Spent 459,000.000 1,147,500.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services		Spent 459,000.000 1,147,500.000 1,606,500.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output	\$pent 459,000.000 1,147,500.000 1,606,500.000 1,606,500.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output  GoU Development	\$pent 459,000.000 1,147,500.000 1,606,500.000 1,606,500.000 0.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output  GoU Development  External Financing	\$\text{Spent}\$ 459,000.000 1,147,500.000 1,606,500.000 1,606,500.000 0.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output  GoU Development  External Financing  Arrears	Spent 459,000.000 1,147,500.000 1,606,500.000 1,606,500.000 0.000 0.000
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output GoU Development External Financing Arrears AIA	Spent 459,000.000 1,147,500.000 1,606,500.000 1,606,500.000 0.000 0.000 6,501,621.900
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output GoU Development External Financing Arrears AIA Total For Project	Spent 459,000.000 1,147,500.000 1,606,500.000 1,606,500.000 0.000 0.000 0.000 6,501,621.900 6,501,621.900
Expenditures incurred in the Quarter to deliver output  Item  224003 Agricultural Supplies and Services	Total For Budget Output  GoU Development External Financing Arrears  AIA  Total For Project GoU Development	UShs Thousand  Spent  459,000.000  1,147,500.000  1,606,500.000  0.000  0.000  6,501,621.900  0.000  0.000  0.000  0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Reasons for Variation in performance
	GRAND TOTAL	22,525,471.932
	Wage Recurrent	9,702,777.318
	Non Wage Recurrent	6,177,310.196
	GoU Development	6,501,621.900
	External Financing	0.000
	Arrears	143,762.518
	AIA	0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

9,702,777.318 2,425,694.330

#### **Quarter 1: Cumulative Outputs and Expenditure by End of Quarter**

211102 Contract Staff Salaries

211104 Employee Gratuity

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	
Departments	
Department:007 NARO-SECRETARIATE	
Budget Output:000001 Audit and Risk Management	
PIAP Output: 01040701 Demand driven agriculture technologies deve	eloped
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.	Three audit reports one each for risk, value for money, NARO assets management, human resource management,
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Item	Spent
221003 Staff Training	8,600.000
224011 Research Expenses	20,846.500
Total For Bu	udget Output 29,446.500
Wage Recurr	rent 0.000
Non Wage R	ecurrent 29,446.500
Arrears	0.000
AIA	0.000
Budget Output:000014 Administrative and Support Services	
PIAP Output: 01040701 Demand driven agriculture technologies deve	eloped
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	Partnerships 1) Initiated a potential partnership with Uganda Industrial Research institute on incubation. 2) Conducted a monitoring visit to the Nile Breweries Limited fields. 3) An inception workshop for the development of a NARO partnership policy held and road map drawn to guide next task force.
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Item	Spent

# **VOTE:** 142 National Agricultural Research Organization (NARO)

<b>Annual Planned Outputs</b>		Cumulative Outputs Achieved by End of Quart	er
Cumulative Expenditures made by the End of th Deliver Cumulative Outputs	e Quarter to		UShs Thousand
Item			Spen
211106 Allowances (Incl. Casuals, Temporary, sitting	ng allowances)		50,156.500
212101 Social Security Contributions			970,277.709
212102 Medical expenses (Employees)			648,260.000
212103 Incapacity benefits (Employees)			101,391.600
221009 Welfare and Entertainment			18,850.00
	Total For B	Budget Output	13,917,407.458
	Wage Recur	rrent	9,702,777.318
	Non Wage 1	Recurrent	4,214,630.140
	Arrears		0.000
	AIA		0.000
	Total For D	Department	13,946,853.958
	Wage Recur	rrent	9,702,777.318
	Non Wage I	Recurrent	4,244,076.640
	Arrears		0.000
	AIA		0.000
Development Projects			
N/A			
SubProgramme:02 Agricultural Production and	Productivity		
Sub SubProgramme:01 Agricultural Research			
Departments			
Department:001 Abi Zonal Agriculture Research	Institute(ZARDI)		
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agricult	ure technologies dev	reloped	
Two appropriate tools developed for Tamarind, She 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	ar, Rubber vine and	2% of the required Ingredients assembled.	

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	<b>Cumulative Outputs Achieved by End of Quarter</b>	
PIAP Output: 01040706 Research-extension farmer linkages developed	and strengthened	
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	
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 seedligs of (10,000) Mango, five thousand (5,000) Citrus, Ten thousand (10,000) Avocado	NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
224011 Research Expenses		9,170.000
Total For Bu	dget Output	9,170.000
Wage Recurre	ent	0.000
Non Wage Re	current	9,170.000
Arrears		0.000
AIA		0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies devel	oped	
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	Two internal consultative meetings held at the institute.	
PIAP Output: 01040706 Research-extension farmer linkages developed	l and strengthened	
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	Maintained the mother gardens for citrus, avocado, mango,	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221008 Information and Communication Technology Supplies.		125.000

# **VOTE:** 142 National Agricultural Research Organization (NARO)

<b>Annual Planned Outputs</b>	ual Planned Outputs Cumulative Outputs Achieved by End		
Cumulative Expenditures made by the End of the Deliver Cumulative Outputs	Quarter to		UShs Thousana
Item			Spent
221011 Printing, Stationery, Photocopying and Bindin	ng		3,392.500
222001 Information and Communication Technology	Services.		93.750
224003 Agricultural Supplies and Services			5,000.000
224011 Research Expenses			10,030.000
227004 Fuel, Lubricants and Oils			1,358.750
	Total For I	Budget Output	20,000.000
	Wage Recu	rrent	0.000
	Non Wage	Recurrent	20,000.000
	Arrears		0.000
	AIA		0.000
	Total For I	Department	29,170.000
	Wage Recu	rrent	0.000
	Non Wage	Recurrent	29,170.000
	Arrears		0.000
	AIA		0.000
Department:002 Buginyaya Zonal Agriculture Res	search Institute(ZA	ARDI)	
Budget Output:010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agricultu	re technologies dev	veloped	
4 partnerships promoted for technology generation 2 research products commercialized 3 research platforms established		Knowledge on research areas and designs for several collaborative and partnership research documented.	disciplines,
<b>Cumulative Expenditures made by the End of the Deliver Cumulative Outputs</b>	Quarter to		UShs Thousand
Item			Spent
211107 Boards, Committees and Council Allowances			1,435.000
212103 Incapacity benefits (Employees)			441.000
221001 Advertising and Public Relations			1,304.000
221007 Books, Periodicals & Newspapers			339.000
221008 Information and Communication Technology	Supplies.		1,565.000
221009 Welfare and Entertainment			300.000

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	<b>Cumulative Outputs Achieved by End of Quarter</b>	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spen
221011 Printing, Stationery, Photocopying and Binding		1,318.000
221012 Small Office Equipment		522.000
222001 Information and Communication Technology Services.		5,609.000
223001 Property Management Expenses		782.000
223004 Guard and Security services		3,261.000
223005 Electricity		1,044.000
223006 Water		783.000
224011 Research Expenses		4,566.000
226001 Insurances		130.000
227004 Fuel, Lubricants and Oils		1,305.000
228001 Maintenance-Buildings and Structures		652.000
228002 Maintenance-Transport Equipment		5,300.000
228003 Maintenance-Machinery & Equipment Other than Transport		1,305.000
228004 Maintenance-Other Fixed Assets		652.000
Total For Buc	dget Output	32,613.000
Wage Recurre	ent	0.000
Non Wage Re	current	32,613.000
Arrears		0.000
AIA		0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies devel	oped	
Four (4) Industrial products for yield improvement and commercialization developed for industry	Fertilizer blends trials for maize, coffee and potato he samples are being processed for final yield data colle	
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	NA	

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040706 Research-extension farmer linkages develop	ed and strengthened
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	4 promising candidate wheat varieties at NPT have been planted in Bukwo, Kween, Bulambuli and at 3 leaf stage; 5 promising maize hybrids namely Q150114, Q160138, Q444614, Q160121 & Q160114 at DUS.  1.5 acres of potato EGS in was established the field on station and is ready for dehauming and harvest; 4, 000 Apical rooted cuttings of potato in the screenhouse are at flowering stage.  15 promising elite wheat lines at ATY at multiple locations in Suam, Kwosir, Bulegeni, Buginyanya, and Kalengyere.
Cumulative Expenditures made by the End of the Quarter to	UShs Thousand
Deliver Cumulative Outputs	
Item	Spent
221011 Printing, Stationery, Photocopying and Binding	775.250
221012 Small Office Equipment	267.500
224002 Veterinary supplies and services	250.000
224003 Agricultural Supplies and Services	2,150.000
224011 Research Expenses	2,300.000
227004 Fuel, Lubricants and Oils	900.000
228002 Maintenance-Transport Equipment	300.000
Total For B	udget Output 6,942.750
Wage Recur	rent 0.000
Non Wage I	Recurrent 6,942.750
Arrears	0.000
AIA	0.000
Budget Output:010011 Technology Promotion	
PIAP Output: 01040705 Demand driven agriculture technologies dev	eloped
2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted	NA
Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes	NA

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by	y End of Quarter
PIAP Output: 01040706 Research-extension farmer linkages	developed and strengthened	
15 adaptive trials, demos and one field day carried out to increase and utilization of improved technologies	e access NA	
<b>Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs</b>		UShs Thousand
Item		Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allowances	s)	2,174.000
211107 Boards, Committees and Council Allowances		957.000
212103 Incapacity benefits (Employees)		348.000
221001 Advertising and Public Relations		870.000
221007 Books, Periodicals & Newspapers		226.000
221008 Information and Communication Technology Supplies.		1,044.000
221009 Welfare and Entertainment		200.000
221011 Printing, Stationery, Photocopying and Binding		1,355.000
221012 Small Office Equipment		348.000
222001 Information and Communication Technology Services.		3,740.000
223001 Property Management Expenses		521.000
223004 Guard and Security services		2,173.000
223005 Electricity		696.000
223006 Water		521.000
224002 Veterinary supplies and services		698.250
224003 Agricultural Supplies and Services		1,413.000
224011 Research Expenses		3,685.000
226001 Insurances		87.000
227004 Fuel, Lubricants and Oils		870.000
228001 Maintenance-Buildings and Structures		435.000
228002 Maintenance-Transport Equipment		3,479.000
228003 Maintenance-Machinery & Equipment Other than Transp	port	870.000
228004 Maintenance-Other Fixed Assets		434.000
Tot	al For Budget Output	27,144.250
Way	ge Recurrent	0.000
Noi	n Wage Recurrent	27,144.250
Arr	ears	0.000

### **VOTE:** 142 National Agricultural Research Organization (NARO)

221017 Membership dues and Subscription fees.

223001 Property Management Expenses

223004 Guard and Security services

222002 Postage and Courier

Quarter 1

595.714297.857

1,191.429 2,978.571

Annual Planned Outputs	Cumulative Outputs Achieved by End o	f Quarter
AIA		0.000
Total For Do	epartment	66,700.000
Wage Recurr	rent	0.000
Non Wage R	ecurrent	66,700.000
Arrears		0.000
AIA		0.000
Department:003 Bulindi Zonal Agriculture Research Institute(ZARD	I)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies deve	eloped	
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	Sourced for Soya and rice seed for the msigmsip partners.	p. Initiated contact with the
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	-	
PIAP Output: 01040706 Research-extension farmer linkages develope	ed and strengthened	
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	1) 50 bags of cassava cuttings ready for up 2) 50 kgs, 2.75 tons and 0.5 tons of Chloris Brachiaria mulato respectivley produced for	s gayana, Sugar napier and
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		1,787.143
221007 Books, Periodicals & Newspapers		595.714
221008 Information and Communication Technology Supplies.		1,489.286
221009 Welfare and Entertainment		1,787.143
221011 Printing, Stationery, Photocopying and Binding		1,787.143
221012 Small Office Equipment		893.57
20101534 1 11 1 10 10 10 1		

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by En	id of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
224010 Protective Gear		595.714
224011 Research Expenses		21,445.714
228002 Maintenance-Transport Equipment		2,978.571
228003 Maintenance-Machinery & Equipment Other than Transport		2,382.857
273102 Incapacity, death benefits and funeral expenses		893.573
Total For	<b>Budget Output</b>	41,700.000
Wage Rec	eurrent	0.000
Non Wage	e Recurrent	41,700.000
Arrears		0.000
AIA		0.000
Total For	Department	41,700.000
Wage Rec	urrent	0.000
Non Wage	e Recurrent	41,700.000
Arrears		0.000
AIA		0.000
Department:004 Kachwekano Zonal Agriculture Research Instituto	e(ZARDI)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies de	eveloped	
Six technologies promoted for food, nutrition and industry Two technologies for food and nutrition security generated	4 bags of avocado planting purchased, NaCORI; 424 Pears raised and grafted, and grafted.	
8 Demand driven agriculture technologies developed and promoted for food and nutrition security; and industry	NA	
PIAP Output: 01040706 Research-extension farmer linkages develo	oped and strengthened	
8 Demand driven agriculture technologies developed and promoted for food and nutrition; and industry	NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousana
Item		Spent
211107 Boards, Committees and Council Allowances		400.000
221008 Information and Communication Technology Supplies.		2,000.000

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs		<b>Cumulative Outputs Achieved by End of Quarter</b>	
Cumulative Expenditures made by the End of the Quart Deliver Cumulative Outputs	ter to		UShs Thousand
Item			Spent
221009 Welfare and Entertainment			1,800.000
221012 Small Office Equipment			350.000
222001 Information and Communication Technology Service	ces.		200.000
223001 Property Management Expenses			2,100.000
223004 Guard and Security services			10,079.000
223005 Electricity			800.000
223006 Water			750.000
224003 Agricultural Supplies and Services			6,002.000
224011 Research Expenses			11,743.600
226001 Insurances			292.500
227004 Fuel, Lubricants and Oils			4,031.400
228001 Maintenance-Buildings and Structures			5,001.500
228002 Maintenance-Transport Equipment			2,400.000
	Total For Bu	dget Output	47,950.000
	Wage Recurre	ent	0.000
	Non Wage Re	current	47,950.000
	Arrears		0.000
	AIA		0.000
	Total For De	partment	47,950.000
	Wage Recurre	ent	0.000
	Non Wage Re	current	47,950.000
	Arrears		0.000
	AIA		0.000
Department:005 Mbarara Zonal Agriculture Research I		OI)	
Budget Output:010008 Capacity Strengthening	`	<u>,                                      </u>	
PIAP Output: 01040705 Demand driven agriculture tecl	hnologies devel	oped	
Five technologies for food, nutrition and industry promoted of the Zone Two technologies generated for market and Industry 6 Research facilities maintained to support research		20 bags for dairy feed supplement 1 technologies generated	ated for farmers.

# VOTE: 142 National Agricultural Research Organization (NARO)

211106 Allowances (Incl. Casuals, Temporary, sitting allowances)

211107 Boards, Committees and Council Allowances

Quarter 1

3,375.000

1,250.000

Annual Planned Outputs	Cumulative Outputs Achieved by End of Qu	uarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spen
224002 Veterinary supplies and services		3,750.000
224003 Agricultural Supplies and Services		2,500.000
224011 Research Expenses		22,950.000
Total For I	Budget Output	29,200.000
Wage Recu	rent	0.000
Non Wage	Recurrent	29,200.000
Arrears		0.000
AIA		0.000
Total For I	epartment	29,200.000
Wage Recu	rent	0.000
Non Wage	Recurrent	29,200.000
Arrears		0.000
AIA	AIA	
Department:006 Nabuin Zonal Agriculture Research Institute(ZARI	DI)	
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technologies dev	eloped	
4adaptable seed varieties produced and availed to farmers 5technologies new cereal and two pulse varieties adapted to NEAZ farmers	of Protocol for production of vegetable seeds, and determined	l biomass form utility
4adaptable seed varieties produced and availed to farmers 5technologies new cereal and two pulse varieties adapted to NEAZ farmers	of 8 acres of pasture seed maintained on-station (acres of Nappier grass).	2 acres of Bracharia and 6
PIAP Output: 01040706 Research-extension farmer linkages develop	ed and strengthened	
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.	Maintained cattle on-station, 20 farmers trained in cattle health management strategies.	t and dry season feeding
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousan
Item		Spen

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by	End of Quarter
Cumulative Expenditures made by the End of th Deliver Cumulative Outputs	e Quarter to	UShs Thousand
Item		Spen
212103 Incapacity benefits (Employees)		375.000
221001 Advertising and Public Relations		500.000
221009 Welfare and Entertainment		475.000
221011 Printing, Stationery, Photocopying and Bind	ling	1,411.000
222002 Postage and Courier		150.000
223001 Property Management Expenses		1,000.000
223004 Guard and Security services		1,500.000
223005 Electricity		1,125.000
224002 Veterinary supplies and services		500.000
224003 Agricultural Supplies and Services		2,056.500
224011 Research Expenses		2,200.000
226001 Insurances		100.000
227004 Fuel, Lubricants and Oils		4,800.000
228001 Maintenance-Buildings and Structures		3,132.500
228002 Maintenance-Transport Equipment		3,750.000
228003 Maintenance-Machinery & Equipment Other	er than Transport	1,500.000
F	Total For Budget Output	29,200.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,200.000
	Arrears	0.000
	AIA	0.000
	Total For Department	29,200.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,200.000
	Arrears	0.000
	AIA	0.000
Department:007 NARO-SECRETARIATE		
Budget Output:010008 Capacity Strengthening		

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies devel	loped
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,	Draft NARO work plans FY 2023/2024 compiled and ready for submission to NARO Council.  Impact assessment tools for the study developed. Study not conducted.
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
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Item	Spent
211106 Allowances (Incl. Casuals, Temporary, sitting allowances)	63,777.500
211107 Boards, Committees and Council Allowances	10,294.000
221007 Books, Periodicals & Newspapers	1,743.000
221008 Information and Communication Technology Supplies.	2,608.500
221009 Welfare and Entertainment	7,685.250
221011 Printing, Stationery, Photocopying and Binding	3,935.000
221012 Small Office Equipment	1,483.500
222001 Information and Communication Technology Services.	11,335.250
222002 Postage and Courier	610.000
223001 Property Management Expenses	11,450.000
223004 Guard and Security services	11,406.250
223005 Electricity	9,360.250
223006 Water	4,392.500
224002 Veterinary supplies and services	9,420.500
224003 Agricultural Supplies and Services	54,673.250
224011 Research Expenses	755,278.057
226001 Insurances	106.250
227001 Travel inland	8,806.500
227004 Fuel, Lubricants and Oils	56,159.950
228001 Maintenance-Buildings and Structures	32,460.750

### VOTE: 142 National Agricultural Research Organization (NARO)

222001 Information and Communication Technology Services.

223001 Property Management Expenses

223004 Guard and Security services

223005 Electricity

223006 Water

Quarter 1

1,625.000

2,225.000

2,750.000

4,750.000

2,950.000

Annual Planned Outputs	<b>Cumulative Outputs Achieved by E</b>	nd of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousana
Item		Spent
228002 Maintenance-Transport Equipment		26,499.560
228003 Maintenance-Machinery & Equipment Other than Transport		9,345.500
228004 Maintenance-Other Fixed Assets		1,166.249
352882 Utility Arrears Budgeting		143,762.518
Total For Buc	dget Output	1,237,760.084
Wage Recurre	nt	0.000
Non Wage Re-	current	1,093,997.566
Arrears		143,762.518
AIA		0.000
Total For Department		1,237,760.084
Wage Recurre	Wage Recurrent  Non Wage Recurrent	
Non Wage Re		
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 devel	oped	
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		
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221008 Information and Communication Technology Supplies.		3,000.000
221011 Printing, Stationery, Photocopying and Binding		4,900.000

# **VOTE:** 142 National Agricultural Research Organization (NARO)

<b>Annual Planned Outputs</b>		<b>Cumulative Outputs Achieved by End of Quarter</b>	
Cumulative Expenditures made by the End of the ODeliver Cumulative Outputs	Quarter to		UShs Thousand
Item			Spent
224003 Agricultural Supplies and Services			6,250.000
224011 Research Expenses			33,550.000
226001 Insurances			575.000
227004 Fuel, Lubricants and Oils			5,200.000
228002 Maintenance-Transport Equipment			2,725.000
228003 Maintenance-Machinery & Equipment Other t	han Transport		4,500.000
<del>.</del> .	Total For Bu	dget Output	75,000.000
	Wage Recurre	ent	0.000
	Non Wage Re	current	75,000.000
	Arrears		0.000
	AIA		0.000
	Total For Dep	partment	75,000.000
	Wage Recurre	ent	0.000
	Non Wage Re	current	75,000.000
	Arrears		0.000
	AIA		0.000
Department:009 National Coffee Research Instituto	2		
Budget Output:010008 Capacity Strengthening			
PIAP Output: 01040705 Demand driven agricultur	e technologies devel	oped	
1 alternative pathway for utilization of cocoa waste de Best-bet coffee system for optimum water use efficien & soil moisture conservation practice for optimum soi management developed 2 Coffee byproducts refi	cy in Robusta coffee	NA	
PIAP Output: 0103020116 Functional public-private	te partnerships esta	l blished for technology development and promotion	
1 alternative pathway for utilization of cocoa waste de Best-bet coffee system for optimum water use efficien & soil moisture conservation practice for optimum soi management developed 2 Coffee byproducts refine	cy in Robusta coffee	Cocoa pulp wine and chocolate prototypes developed protypes require further profiling for their constituent coertification/quality market. Work still on-going.     Established Stakeholder preferences on coffee variet Uganda. Work still on-going.     Two non- dietary coffee products refined for comments.	ontents and

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by	End of Quarter
Cumulative Expenditures made by the End of Deliver Cumulative Outputs	the Quarter to	UShs Thousand
Item		Spen
221007 Books, Periodicals & Newspapers		387.325
221008 Information and Communication Technol	logy Supplies.	1,186.182
221009 Welfare and Entertainment		2,469.195
221011 Printing, Stationery, Photocopying and Bi	inding	1,101.455
222002 Postage and Courier		242.078
223001 Property Management Expenses		1,077.247
223004 Guard and Security services		968.312
223005 Electricity		1,089.351
224003 Agricultural Supplies and Services		10,590.913
224010 Protective Gear		847.273
224011 Research Expenses		7,542.756
227004 Fuel, Lubricants and Oils		12,648.575
228001 Maintenance-Buildings and Structures		3,914.401
228002 Maintenance-Transport Equipment		2,178.702
228003 Maintenance-Machinery & Equipment Other than Transport		2,487.352
228004 Maintenance-Other Fixed Assets		121.039
273102 Incapacity, death benefits and funeral exp	penses	447.844
	Total For Budget Output	49,300.000
	Wage Recurrent	0.000
	Non Wage Recurrent	49,300.000
	Arrears	0.000
	AIA	0.000
	Total For Department	49,300.000
	Wage Recurrent	0.000
	Non Wage Recurrent	49,300.000
	Arrears	0.000
	AIA	0.000
Department:010 National Crops Resources Re		
Budget Output:010008 Capacity Strengthening		

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter
PIAP Output: 01040705 Demand driven agriculture technologies development	oped
10 market-oriented products generated 5 research products and services suitable for industry developed	NA
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Item	Spent
221001 Advertising and Public Relations	4,250.000
221008 Information and Communication Technology Supplies.	750.000
221011 Printing, Stationery, Photocopying and Binding	1,250.000
222001 Information and Communication Technology Services.	750.000
223004 Guard and Security services	1,750.000
223005 Electricity	7,450.000
224005 Laboratory supplies and services	750.000
224011 Research Expenses	11,605.000
227004 Fuel, Lubricants and Oils	2,000.000
228001 Maintenance-Buildings and Structures	1,250.000
228002 Maintenance-Transport Equipment	4,000.000
228003 Maintenance-Machinery & Equipment Other than Transport	1,000.000
Total For Buc	dget Output 36,805.000
Wage Recurre	nt 0.000
Non Wage Re	current 36,805.000
Arrears	0.000
AIA	0.000
Budget Output:010011 Technology Promotion	
PIAP Output: 01040705 Demand driven agriculture technologies development	oped
15 Agriculture Research products for food, nutrition and industry promoted along uptake pathways.	NA
PIAP Output: 01040706 Research-extension farmer linkages developed	and strengthened
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	NA

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs		End of Quarter
Cumulative Expenditures made by the End of the Q Deliver Cumulative Outputs	uarter to	UShs Thousana
Item		Spent
221009 Welfare and Entertainment		875.000
224003 Agricultural Supplies and Services		5,000.000
224011 Research Expenses		19,125.000
	Total For Budget Output	25,000.000
	Wage Recurrent	0.000
	Non Wage Recurrent	25,000.000
	Arrears	0.000
	AIA	0.000
	Total For Department	61,805.000
	Wage Recurrent	0.000
	Non Wage Recurrent	61,805.000
	Arrears	0.000
	AIA	0.000
Department:011 National Fisheries Resources Resea	rch Institute	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture	technologies developed	
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	NA	
Cumulative Expenditures made by the End of the Q Deliver Cumulative Outputs	uarter to	UShs Thousand
Item		Spent
221001 Advertising and Public Relations		1,886.640
221007 Books, Periodicals & Newspapers		943.320
221008 Information and Communication Technology S	upplies.	786.100
221009 Welfare and Entertainment		1,493.590
221011 Printing, Stationery, Photocopying and Binding		1,336.370
222001 Information and Communication Technology S	ervices.	3,340.925
223004 Guard and Security services		2,358.300

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quart	ter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spen
223005 Electricity		1,965.250
223006 Water		1,965.250
224011 Research Expenses		10,062.180
227004 Fuel, Lubricants and Oils		2,947.875
228001 Maintenance-Buildings and Structures		5,974.360
228002 Maintenance-Transport Equipment		1,965.250
228003 Maintenance-Machinery & Equipment Other than Transport		2,224.590
Total For Bu	idget Output	39,250.000
Wage Recurr	ent	0.000
Non Wage Ro	ecurrent	39,250.000
Arrears		0.000
AIA		0.000
Budget Output:010010 Technology Generation PIAP Output: 01040705 Demand driven agriculture technologies deve	loned	
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	(i) Maintained the freshwater biodiversity portal at https://freshwaterbiodiversity.go.ug/ (ii) Published from the national redlist assessments for 10 species	fish distribution maps
PIAP Output: 01040706 Research-extension farmer linkages developed	d and strengthened	
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)	NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spen
224003 Agricultural Supplies and Services		6,325.000
224011 Research Expenses		3,055.000
227004 Fuel, Lubricants and Oils		675.000
Total For Bu	idget Output	10,055.000
Wage Recurr		0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Cumulative Expenditures made by the End of the Quarter to

Quarter 1

UShs Thousand

Annual Planned Outputs		End of Quarter
Non	Wage Recurrent	10,055.000
Arre	ars	0.000
AIA		0.000
Tota	l For Department	49,305.000
Wag	e Recurrent	0.000
Non	Wage Recurrent	49,305.000
Arre	ars	0.000
AIA		0.000
Department:012 National Forestry Resources Research Institu	ute	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agriculture technology	gies developed	
5 best performing clonal avocado rootstocks determined 5 trials in avocado growing zones established 3 Avocado storage and post-harvest euipment developed Avocado oils and seed powder from 10 varieties profiled 5 multi-stakeholder innovation platforms	35,000 clean rootstocks is being rais production of Hass avocado plantlet	

<b>Deliver Cumulative Outputs</b>		
Item		Spent
221009 Welfare and Entertainment		1,000.000
221011 Printing, Stationery, Photocopying and Binding		1,100.000
222001 Information and Communication Technology Service	es.	600.000
222002 Postage and Courier		100.000
223001 Property Management Expenses		2,000.000
223004 Guard and Security services		2,484.000
223005 Electricity		4,170.000
224010 Protective Gear		181.000
224011 Research Expenses		1,000.000
227004 Fuel, Lubricants and Oils		3,000.000
228001 Maintenance-Buildings and Structures		1,000.000
228002 Maintenance-Transport Equipment		2,000.000
228004 Maintenance-Other Fixed Assets		1,000.000
	Total For Budget Output	19,635.000
	Wage Recurrent	0.000

# VOTE: 142 National Agricultural Research Organization (NARO)

Arrears  AIA  Budget Output:010010 Technology Generation  PIAP Output: 01040705 Demand driven agriculture technologies of 110,000 Hass Avocado seedlings produced and extended to famers.  PIAP Output: 01040706 Research-extension farmer linkages devel 15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and us as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona	35,000 clean rootstocks is being raised for grafting with Hass for production of Hass avocado plantlets.
	developed  35,000 clean rootstocks is being raised for grafting with Hass for production of Hass avocado plantlets.  eloped and strengthened  sed 16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI
Budget Output: 010010 Technology Generation  PIAP Output: 01040705 Demand driven agriculture technologies of 110,000 Hass Avocado seedlings produced and extended to famers.  PIAP Output: 01040706 Research-extension farmer linkages devel 15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and us as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona	developed  35,000 clean rootstocks is being raised for grafting with Hass for production of Hass avocado plantlets.  eloped and strengthened  sed 16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI
PIAP Output: 01040705 Demand driven agriculture technologies of 110,000 Hass Avocado seedlings produced and extended to famers.  PIAP Output: 01040706 Research-extension farmer linkages devel 15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and us as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona	35,000 clean rootstocks is being raised for grafting with Hass for production of Hass avocado plantlets.  eloped and strengthened  sed 16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI
110,000 Hass Avocado seedlings produced and extended to famers.  PIAP Output: 01040706 Research-extension farmer linkages devel  15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and us as a source of germplasm and breeding  One cottage industry for Annona developed Value Chain of Annona	35,000 clean rootstocks is being raised for grafting with Hass for production of Hass avocado plantlets.  eloped and strengthened  sed 16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI
PIAP Output: 01040706 Research-extension farmer linkages devel 15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and us as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona	production of Hass avocado plantlets.  Ploped and strengthened  sed
15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and us as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona	sed 16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI
as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousan
Item	Spe
221001 Advertising and Public Relations	1,082.4
221007 Books, Periodicals & Newspapers	324.74
222001 Information and Communication Technology Services.	2,164.99
224011 Research Expenses	8,042.8
Total Fo	or Budget Output 11,615.00
Wage Re	ecurrent 0.00
Non Wag	ge Recurrent 11,615.00
Arrears	0.00
AIA	0.00
Total Fo	or Department 31,250.00
Wage Re	ecurrent 0.00
Non Wag	ge Recurrent 31,250.00
Arrears	0.00
AIA	0.00
Department:013 Mukono Zonal Agriculture Research Institute (Z.	ZARDI)

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	<b>Cumulative Outputs Achieved by</b>	End of Quarter
PIAP Output: 01040705 Demand driven agriculture technolog	ies developed	
Two Value added products of tomato and pineapple developed and promoted	NA NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221011 Printing, Stationery, Photocopying and Binding		1,875.000
222001 Information and Communication Technology Services.		1,158.000
223004 Guard and Security services		6,000.000
223005 Electricity		5,250.000
223006 Water		850.000
224011 Research Expenses		8,634.000
227004 Fuel, Lubricants and Oils		1,575.000
Tota	ll For Budget Output	25,342.000
Wag	e Recurrent	0.000
Non	Wage Recurrent	25,342.000
Arre	ars	0.000
AIA		0.000
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agriculture technolog	gies developed	
5 technology demonstration established	1) Two coffee mother gardens at Mu acre) were maintained.	akono (1 acre) and Kamenyamiggo (1
50,000 coffee and 100,000 cocoa seedlings produced	2) 8 acres of banana plantations wer Kamenyamiggo station.	e maintained at Mukono and
	10,997 coffee cuttings availed to upt	vard from the previous quarter of which take patheways and 3830 cuttings are otal of 20,900 cuttings were potted and
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221001 Advertising and Public Relations		1,875.000

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by I	End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
221009 Welfare and Entertainment		600.000
222001 Information and Communication Technology Services.		2,648.500
223001 Property Management Expenses		2,593.000
224011 Research Expenses		21,891.000
226001 Insurances		500.000
228001 Maintenance-Buildings and Structures		3,375.000
228002 Maintenance-Transport Equipment		3,500.000
228003 Maintenance-Machinery & Equipment Other than Trans	port	1,650.500
228004 Maintenance-Other Fixed Assets		500.000
273102 Incapacity, death benefits and funeral expenses		1,500.000
То	tal For Budget Output	40,633.000
Wa	age Recurrent	0.000
No	n Wage Recurrent	40,633.000
Ar	rears	0.000
AL	4	0.000
To	tal For Department	65,975.000
Wa	age Recurrent	0.000
No	n Wage Recurrent	65,975.000
Ar	rears	0.000
AL	4	0.000
Department:014 National Livestock Resources Research Ins	titute (NaLIRRI)	
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technological	ogies developed	
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	NA	

# VOTE: 142 National Agricultural Research Organization (NARO)

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
221003 Staff Training	5,000.000
221008 Information and Communication Technology Supplies.	9,425.000
221009 Welfare and Entertainment	3,124.000
221011 Printing, Stationery, Photocopying and Binding	1,813.000
221012 Small Office Equipment	5,373.000
221017 Membership dues and Subscription fees.	5,507.000
222002 Postage and Courier	2,862.000
223001 Property Management Expenses	3,250.000
223002 Property Rates	1,124.500
223004 Guard and Security services	10,000.000
223005 Electricity	10,000.000
223006 Water	2,500.000
224001 Medical Supplies and Services	10,000.000
224002 Veterinary supplies and services	2,500.000
224003 Agricultural Supplies and Services	20,125.000
224004 Beddings, Clothing, Footwear and related Services	8,250.000
224005 Laboratory supplies and services	4,000.000
224011 Research Expenses	22,951.500
225101 Consultancy Services	750.000
226002 Licenses	1,750.000
227001 Travel inland	1,250.000
227004 Fuel, Lubricants and Oils	500.000
228001 Maintenance-Buildings and Structures	10,625.000
228002 Maintenance-Transport Equipment	7,875.000
228004 Maintenance-Other Fixed Assets	5,000.000
Total For I	Budget Output 155,555.000
Wage Recu	rrent 0.000
Non Wage	Recurrent 155,555.000
Arrears	0.000
AIA	0.000

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs Cumulative Outputs Achieved by End of Qua		<b>Cumulative Outputs Achieved by End of Quarter</b>	
	Total For De	partment	155,555.00
	Wage Recurr	ent	0.00
	Non Wage Ro	ecurrent	155,555.00
	Arrears		0.00
	AIA		0.00
Department:015 National Semi Arid Resources Resear	rch Institute (Na	SARRI)	
Budget Output:010010 Technology Generation			
PIAP Output: 01040705 Demand driven agriculture to	echnologies deve	loped	
Diversity of two crop varieties germplasm (mungbean and determined	d sesame)	NA	
Five cotton lines resilient to climatic change with high yie identified to support the textile industry and related cotton			
Cumulative Expenditures made by the End of the Qua Deliver Cumulative Outputs	arter to		UShs Thousand
Item			Spen
224003 Agricultural Supplies and Services			832.50
224011 Research Expenses			3,885.00
227004 Fuel, Lubricants and Oils			555.00
228003 Maintenance-Machinery & Equipment Other than	n Transport		282.50
	Total For Bu	ndget Output	5,555.00
	Wage Recurr	ent	0.00
Non Wage Recurrent		5,555.00	
Arrears			0.00
AIA		0.00	
Budget Output:010011 Technology Promotion			
PIAP Output: 01040705 Demand driven agriculture to	echnologies deve	loped	
Generation Seed (EGS) produced to promote uptake of te through private sector. Technologies for food, nutrition and Industry promoted in located 4 Argo ecological zones	C	205 acres of planted sorghum foundation seed.	

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved b	y End of Quarter
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spend
221001 Advertising and Public Relations		750.000
221007 Books, Periodicals & Newspapers		1,250.000
221008 Information and Communication Technology Supplies.		2,750.000
221009 Welfare and Entertainment		1,250.000
221011 Printing, Stationery, Photocopying and Binding		750.000
222001 Information and Communication Technology Services.		500.000
223001 Property Management Expenses		1,000.000
223004 Guard and Security services		2,400.000
223005 Electricity		3,600.000
223006 Water		1,000.000
224011 Research Expenses		5,500.000
226001 Insurances		250.000
227004 Fuel, Lubricants and Oils		1,500.000
228002 Maintenance-Transport Equipment		1,500.000
273102 Incapacity, death benefits and funeral expenses		1,000.000
Total F	or Budget Output	25,000.000
Wage R	ecurrent	0.000
Non Wa	ge Recurrent	25,000.000
Arrears		0.000
AIA		0.000
Total F	or Department	30,555.000
Wage R	ecurrent	0.000
Non Wa	ge Recurrent	30,555.000
Arrears		0.000
AIA		0.000
Department:016 Ngetta ZARDI		
Budget Output:010010 Technology Generation		

### VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

#### **Annual Planned Outputs**

#### **Cumulative Outputs Achieved by End of Quarter**

#### PIAP Output: 01040705 Demand driven agriculture technologies developed

- 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) 6 acres of groundnut, 6 acres of rice and 6 acres bean foundation seed plots established and maintained (first cycle).
- 2) Data set on the survival rate, growth vigor of different grafting and propagating techniques in sheanut, tamarind and green heart tree (Warburgia Ugandensis) collected.

# Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs

UShs Thousand

0.000

Item		Spent
212103 Incapacity benefits (Employees)		3,000.000
221011 Printing, Stationery, Photocopying and Bi	inding	500.000
223006 Water		1,750.000
224003 Agricultural Supplies and Services		4,000.000
224011 Research Expenses		16,170.000
228001 Maintenance-Buildings and Structures		1,250.000
228002 Maintenance-Transport Equipment		1,250.000
228003 Maintenance-Machinery & Equipment O	ther than Transport	1,250.000
	Total For Budget Output	29,170.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,170.000
	Arrears	0.000
	AIA	0.000
	Total For Department	29,170.000
	Wage Recurrent	0.000
	Non Wage Recurrent	29,170.000
	Arrears	0.000

AIA

#### Department:017 Rwebitaba ZARDI

#### **Budget Output:010010 Technology Generation**

#### PIAP Output: 01040705 Demand driven agriculture technologies developed

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.

### **VOTE:** 142 National Agricultural Research Organization (NARO)

<b>Annual Planned Outputs</b>	Cumulative Outputs Achieved by	End of Quarter
Cumulative Expenditures made by the End of the Deliver Cumulative Outputs	ne Quarter to	UShs Thousand
Item		Spen
221003 Staff Training		1,415.483
221007 Books, Periodicals & Newspapers		707.742
221008 Information and Communication Technolo	gy Supplies.	1,321.118
221009 Welfare and Entertainment		1,179.569
221011 Printing, Stationery, Photocopying and Bin	ding	1,415.483
222001 Information and Communication Technolo	gy Services.	2,311.956
223001 Property Management Expenses		2,595.052
223004 Guard and Security services		2,076.042
223005 Electricity		1,415.483
223006 Water		2,830.966
224003 Agricultural Supplies and Services		2,807.375
224004 Beddings, Clothing, Footwear and related	Services	943.655
224011 Research Expenses		15,623.394
226001 Insurances		283.097
227004 Fuel, Lubricants and Oils		4,010.535
228001 Maintenance-Buildings and Structures		1,179.569
228002 Maintenance-Transport Equipment		3,774.622
228004 Maintenance-Other Fixed Assets		1,509.849
	Total For Budget Output	47,400.990
	Wage Recurrent	0.000
	Non Wage Recurrent	47,400.990
	Arrears	0.000
	AIA	0.000
	Total For Department	47,400.990
	Wage Recurrent	0.000
	Non Wage Recurrent	47,400.990
	Arrears	0.000
	AIA	0.000
Development Projects		

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	
Project:1560 Relocation and Operationalisation of the National Livesto	ock Resources Research Institute(NALIRRI)	
<b>Budget Output:000017 Infrastructure Development and Management</b>		
PIAP Output: 01040705 Demand driven agriculture technologies devel	loped	_
Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed.  1 kilometer of barbed wire fence constructed.	NA	
Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed.  1 kilometer of barbed wire fence constructed.	NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand
Item		Spent
Total For Bu	dget Output	0.000
GoU Develop	oment	0.000
External Final	neing	0.000
Arrears		0.000
AIA		0.000
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agriculture technologies devel	loped	
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	
PIAP Output: 01040706 Research-extension farmer linkages developed	l and strengthened	
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	NA	
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs		UShs Thousand

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs		<b>Cumulative Outputs Achieved by End of Quarter</b>	
Project:1560 Relocation and Operationalisation of the N	ational Livesto	ock Resources Research Institute(NALIRRI)	
Item			Spent
	Total For Bud	dget Output	0.000
	GoU Develop	ment	0.000
	External Finar	ncing	0.000
	Arrears		0.000
	AIA		0.000
	Total For Pro	ject	0.000
	GoU Develop	ment	0.000
	External Finar	ncing	0.000
	Arrears		0.000
	AIA		0.000
Project:1619 Retooling of National Agricultural Research	h Organization	1	
Budget Output:000003 Facilities and Equipment Manag	ement		
PIAP Output: 01040705 Demand driven agriculture tech	nologies devel	oped	
4 research laboratories equipped and supplied with consuma research.  Seven research laboratories maintained  Five research laboratories Audited and upgraded towards according to the consumation of the c		NA	
Four Agricultural research laboratories of strategic importan 16 Agricultural research Institutes retooled with 24 units of equipment to support research 16 Public Agricultural research Institutes retooled with comp	transport	NA	
Cumulative Expenditures made by the End of the Quart Deliver Cumulative Outputs	er to		UShs Thousand
Item			Spent
	Total For Bud	dget Output	0.000
	GoU Develop	ment	0.000
	External Finar	ncing	0.000
	Arrears		0.000
	AIA		0.000
Budget Output:010008 Capacity Strengthening			

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by	End of Quarter
Project:1619 Retooling of National Agricultural R	esearch Organization	
PIAP Output: 01040705 Demand driven agricultu	re technologies developed	
NARO human resource capacity strengthened throug completion of 32 PhDs for research and product deve NARO laboratory management strengthened towards National laboratories.  10 titles acquired for research land	lopment.	
<b>Cumulative Expenditures made by the End of the Deliver Cumulative Outputs</b>	Quarter to	UShs Thousand
Item		Spent
224011 Research Expenses		1,820,525.500
227004 Fuel, Lubricants and Oils		49,796.400
	Total For Budget Output	1,870,321.900
	GoU Development	1,870,321.900
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
Budget Output:010009 Research Partnerships		
PIAP Output: 01040705 Demand driven agricultu	re technologies developed	
NNARO annual subscription to four international res maintained for technology generation and transfer for and productivity.	•	
Cumulative Expenditures made by the End of the Deliver Cumulative Outputs	Quarter to	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:010010 Technology Generation		

### VOTE: 142 National Agricultural Research Organization (NARO)

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter
Project:1619 Retooling of National Agricultural Research Organization	n
PIAP Output: 01040705 Demand driven agriculture technologies devel	oped
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	NA
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Item	Spent
224003 Agricultural Supplies and Services	976,740.000
224011 Research Expenses	2,048,060.000
Total For Bu	dget Output 3,024,800.000
GoU Develop	ment 3,024,800.000
External Finan	ncing 0.000
Arrears	0.000
AIA	0.000
Budget Output:010011 Technology Promotion	
PIAP Output: 01040705 Demand driven agriculture technologies devel	oped
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	NA
Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Item	Spent
224003 Agricultural Supplies and Services	459,000.000
224011 Research Expenses	1,147,500.000
Total For Bu	dget Output 1,606,500.000
GoU Develop	ment 1,606,500.000
External Finan	ncing 0.000
Arrears	0.000
AIA	0.000
Total For Pro	oject 6,501,621.900
GoU Develop	ment 6,501,621.900

### VOTE: 142 National Agricultural Research Organization (NARO)

<b>Annual Planned Outputs</b>	<b>Cumulative Outputs Achieved by End of Quarter</b>	
	External Financing	0.000
	Arrears	0.000
	AIA	0.000
	GRAND TOTAL	22,525,471.932
	Wage Recurrent	9,702,777.318
	Non Wage Recurrent	6,177,310.196
	GoU Development	6,501,621.900
	External Financing	0.000
	Arrears	143,762.518
	AIA	0.000

### VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

### Quarter 2: Revised Workplan

Departments

Department:001 Abi Zonal Agriculture Research Institute(ZARDI)

Annual Plans	Quarter's Plan	Revised Plans
Programme:01 AGRO-INDUSTRIALIZATIO	N	
SubProgramme:01		
Sub SubProgramme:01 Agricultural Research		
Departments		
Department:007 NARO-SECRETARIATE		
Budget Output:000001 Audit and Risk Manage	ement	
PIAP Output: 01040701 Demand driven agricu	lture technologies developed	
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 Sup	oport Services	
PIAP Output: 01040701 Demand driven agricu	lture technologies developed	
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
Develoment Projects	I	1
N/A SubProgramme:02		
Sub SubProgramme:01 Agricultural Research		

FY 2022/23 **Vote Performance Report** 

# VOTE: 142 National Agricultural Research Organization (NARO)

region

Market information generated on 2 selected

commodities of sorghum and goats in West Nile

Quarter 1

West Nile region initiated

information generated on 1 selected commodity

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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	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	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
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened	
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	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	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
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 seedligs 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 seedligs 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 seedligs of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
Two functional public private partnerships and platforms established for promotion of Fish and Cassava products and services	Initiate One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market	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

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans
<b>Budget Output:010011 Technology Promotion</b>		
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened	
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	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	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
Department:002 Buginyaya Zonal Agriculture	Research Institute(ZARDI)	
Budget Output:010008 Capacity Strengthening	9	
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
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
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
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 variety with adequate resistance to major pests and diseases developed to support house food security and incomes	Ivariety with adequate resistance to major pests and diseases developed to support house food security and incomes
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened	
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 1 Industrial 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 1 Industrial products for yield improvement 1 scientific paper published

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010011 Technology Promotion		
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
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
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
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened	
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	4 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies
Department:003 Bulindi Zonal Agriculture Re	search Institute(ZARDI)	
Budget Output:010010 Technology Generation	I .	
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
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
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	NA
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened	
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

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans
<b>Budget Output:010010 Technology Generation</b>		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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
PIAP Output: 01040706 Research-extension fai	mer linkages developed and strengthened	
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 R	esearch Institute(ZARDI)	
Budget Output:010008 Capacity Strengthening		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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
Department:006 Nabuin Zonal Agriculture Res	earch Institute(ZARDI)	
<b>Budget Output:010011 Technology Promotion</b>		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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

# VOTE: 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010011 Technology Promotion		
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened	
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.
Department:007 NARO-SECRETARIATE		
<b>Budget Output:010008 Capacity Strengthening</b>	,	
PIAP Output: 01040705 Demand driven agricu	lture technologies 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 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 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	NA
Department:008 National Agricultural Research	ch Laboratories	

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010008 Capacity Strengthening	g	
PIAP Output: 01040705 Demand driven agric	ulture technologies developed	
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	1 Agriculture Research Innovations and IPs commercialized 1research products and services for food and nutrition security	1 Agriculture Research Innovations and IPs commercialized 1 research products and services for food and nutrition security
Department:009 National Coffee Research Ins	titute	
Budget Output:010008 Capacity Strengthening	g	
PIAP Output: 01040705 Demand driven agricu	ulture technologies developed	
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	NA
PIAP Output: 0103020116 Functional public-p	 orivate partnerships established for technology d	evelopment and promotion
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 Re	search Institute	
Budget Output:010008 Capacity Strengthenin	g	
PIAP Output: 01040705 Demand driven agricu	ulture technologies developed	
10 market-oriented products generated 5 research products and services suitable for industry developed	2 market-oriented products generated 5 research products and services suitable for industry developed	2 market-oriented products generated 5 research products and services suitable for industry developed

# **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans	
Budget Output:010011 Technology Promotion	1		
PIAP Output: 01040705 Demand driven agric	ulture technologies developed		
15 Agriculture Research products for food, nutrition and industry promoted along uptake pathways.	3 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways.	3 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways.	
PIAP Output: 01040706 Research-extension f	armer linkages developed and strengthened		
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 2 Agricultural 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 2 Agricultural research platforms established 5 improved technologies and innovations adapted			
Department:011 National Fisheries Resources	Research Institute		
<b>Budget Output:010008 Capacity Strengthenin</b>	ıg		
PIAP Output: 01040705 Demand driven agric	ulture technologies developed		
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	
<b>Budget Output:010010 Technology Generatio</b>	n		
PIAP Output: 01040705 Demand driven agric	ulture technologies developed		
1 freshwater biodiversity portal for Uganda developed 3 georeferenced maps for fish species for Ugand produced 1 Water quality indicator and explorer developed 1 policy brief	developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1	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	

### **VOTE:** 142 National Agricultural Research Organization (NARO)

i IN	Quantan's Plan	Revised Plans	
Annual Plans	Quarter's Plan	Revised Flans	
Budget Output:010010 Technology Generation			
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened		
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 I	Research Institute		
<b>Budget Output:010008 Capacity Strengthening</b>	;		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed		
5 best performing clonal avocado rootstocks determined 5 trials in avocado growing zones established 3 Avocado storage and post-harvest euipment 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	
<b>Budget Output:010010 Technology Generation</b>			
PIAP Output: 01040705 Demand driven agricu	lture technologies developed		
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.	
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened		
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	
Department:013 Mukono Zonal Agriculture Ro	esearch Institute (ZARDI)		
<b>Budget Output:010010 Technology Generation</b>			
PIAP Output: 01040705 Demand driven agricu	lture technologies developed		
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	

### VOTE: 142 National Agricultural Research Organization (NARO)

ulture technologies developed	
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
	<i>y</i> 31
s Research Institute (NaLIRRI)	
n	
ulture technologies developed	
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
es Research Institute (NaSARRI)	
n	
ulture technologies developed	
1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,	1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,
	'
ulture technologies developed	
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
	I technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced  s Research Institute (NaLIRRI)  n  culture technologies developed  50 MT of conserved feed resources produced 50 Inbred line with different genetic back ground assembled 50 Samples for genotyping collected & processed  es Research Institute (NaSARRI)  n  culture technologies developed  1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains, and culture technologies developed  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

### VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

Annual Plans	Quarter's Plan	Revised Plans
Budget Output:010010 Technology Generation		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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		
<b>Budget Output:010010 Technology Generation</b>		
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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
Develoment Projects		
Project:1560 Relocation and Operationalisation	n of the National Livestock Resources Research	Institute(NALIRRI)
Budget Output:000017 Infrastructure Develop	ment and Management	
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
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		<u>I</u>
PIAP Output: 01040705 Demand driven agricu	lture technologies developed	
3MT tons of forage seed produced, 2 high	1MT ton of forage seed produced, 1 high yielding	1MT ton of forage seed produced, 1 high yielding

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

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 crosesses

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 crossesses

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans	
Project:1560 Relocation and Operationalisation	n of the National Livestock Resources Research	Institute(NALIRRI)	
<b>Budget Output:010010 Technology Generation</b>	Budget Output:010010 Technology Generation		
PIAP Output: 01040706 Research-extension fa	rmer linkages developed and strengthened		
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	NA	
Project:1619 Retooling of National Agricultura	l Research Organization	<u> </u>	
Budget Output:000003 Facilities and Equipme	nt Management		
PIAP Output: 01040705 Demand driven agricu	llture technologies developed	_	
4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation	NA	NA	
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	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	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	

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Annual Plans	Quarter's Plan	Revised Plans
Project:1619 Retooling of National Agricultura	al Research Organization	
Budget Output:010008 Capacity Strengthening	g	
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
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
<b>Budget Output:010009 Research Partnerships</b>		
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
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 agricu	ılture technologies developed	
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. 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. 3 of research products and services suitable for food Nutrition and industry developed
<b>Budget Output:010011 Technology Promotion</b>		
PIAP Output: 01040705 Demand driven agricu	ılture technologies developed	
5 agricultural research innovations and IPs commercialized 5 multi-stakeholders agricultural research innovation platforms established 9 climate-smart technologies demonstrations established in all the ZARDIs 16 Public-Private Partnerships established	1 agricultural research innovations and IPs commercialized, 1 multi-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, 1 multi-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 1

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

**Table 4.1: NTR Collections** 

Revenue Code	Revenue Name		Planned Collection FY2022/23 (Billions)	Actuals By End Q1
142120	Sale of Agricultural products and servicesFrom Private Entities		891,063,000.000	0.000
141541	Rent & Rates - Non-Produced Assets - from Gov't units		261,943,000.000	0.000
142119	Sale of bid documents-From Private Entities		25,000,000.000	0.000
		Total	1,178,006,000.000	0.000

**VOTE:** 142 National Agricultural Research Organization (NARO)

Quarter 1

Table 4.2: Off-Budget Expenditure By Department and Project

# VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 1

**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,
<b>Budget Allocation (Billion):</b>	0.156
Performance Indicators:	Number of Gender responsive technologies (5) generated, promoted and commercialized.
Actual Expenditure By End Q1	
Performance as of End of Q1	Culinary and sensory tests were conducted for the recently released cassava varieties. These included individuals of all gender.
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 Q1	
Performance as of End of Q1	
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
<b>Budget Allocation (Billion):</b>	0.200

### **VOTE:** 142 National Agricultural Research Organization (NARO)

Quarter 1

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 Q1	
Performance as of End of Q1	There were a number of efforts geared towards conserving genetic materials. At the Entebbe botanical gardens 200 accessions were xtic and added to the existing collection. other conservation are NASARRI, NACORI. The different mother gardens at the PARIs were maintained. A pasturemuseum is maintaine at NALIRRI. While a fish broodstock is maintaine at NAFIRRI, Abi and Kachwekano. At NACRRI A number of
Reasons for Variations	

### 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.
<b>Budget Allocation (Billion):</b>	0.350
Performance Indicators:	No of innovations and technologies (2) promoted for the management of Covid 19
Actual Expenditure By End Q1	
Performance as of End of Q1	
Reasons for Variations	