

Vote:142 National Agricultural Research Organisation

QUARTER 3: Highlights of Vote Performance

V1: Summary of Issues in Budget Execution

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

	Approved Budget	Released by End Q 3	Spent by End Q3	% Budget Released	% Budget Spent	% Releases Spent
Recurrent Wage	34.233	25.675	25.675	75.0%	75.0%	100.0%
Non Wage	24.604	18.154	16.854	73.8%	68.5%	92.8%
Devt. GoU	51.473	33.833	29.539	65.7%	57.4%	87.3%
Ext. Fin.	0.000	0.000	0.000	0.0%	0.0%	0.0%
GoU Total	110.310	77.662	72.068	70.4%	65.3%	92.8%
Total GoU+Ext Fin (MTEF)	110.310	77.662	72.068	70.4%	65.3%	92.8%
Arrears	0.298	0.298	0.298	100.0%	100.0%	100.0%
Total Budget	110.608	77.959	72.366	70.5%	65.4%	92.8%
<i>A.I.A Total</i>	0.000	0.000	0.000	0.0%	0.0%	0.0%
Grand Total	110.608	77.959	72.366	70.5%	65.4%	92.8%
Total Vote Budget Excluding Arrears	110.310	77.662	72.068	70.4%	65.3%	92.8%

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

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% Budget Released	% Budget Spent	%Releases Spent
Programme: Agro-Industrialisation	110.31	77.66	72.07	70.4%	65.3%	92.8%
Sub-SubProgramme: 51 Agricultural Research	110.31	77.66	72.07	70.4%	65.3%	92.8%
Total for Vote	110.31	77.66	72.07	70.4%	65.3%	92.8%

Matters to note in budget execution

Budget execution during the reporting period was affected by inadequate and inefficient transport equipment which is above the recommended mileage of 250,000 kilometers or five years. NARO has consistently suffered the prohibition on purchase of vehicles for the last six years which has affected the mobility of scientists to conduct research, hence reducing performance. A special government intervention is required for improved performance.

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

<i>(i) Major unspent balances</i>	
Departments , Projects	
Sub-SubProgramme 51 Agricultural Research	
1.210 Bn Shs	<i>Department/Project :01 Headquarters</i>

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Reason: One new agricultural laboratories electricity metre had not been installed by the end of the quarter.	
The Council meeting was rescheduled to 1st week of April.	
The supervisory field Travels were halted due to hiking fuel prices.	
The supervisory field Travels were halted due to hiking fuel prices.	
Covid awareness campaigns contributed to less deaths cases.	
Improved IT infrastructure reduced costs of communication.	
<i>Items</i>	
762,735,709.000 UShs	212101 Social Security Contributions
Reason: The configuration IFMS system between NARO and NSSF development a problem which was rectified 1st week of April 2022	
132,660,517.000 UShs	224006 Agricultural Supplies
Reason: An invoice for one batch of agricultural Chemicals supplied to NARO, was not received by end of the quarter	
89,742,283.000 UShs	227001 Travel inland
Reason: The supervisory field Travels were halted due to hiking fuel prices.	
55,000,000.000 UShs	226001 Insurances
Reason: The insurance demand note from our insurers for March 2022 needed to be reconciled with NARO's insurance payable statement thus a need for reconciliation statement before payment. This was settled 1st week of April 2022.	
46,340,000.000 UShs	221016 IFMS Recurrent costs
Reason: The planned IFMS accessories and training of staff were postponed to the following quarter due to emergent activities brought on board.	
0.018 Bn Shs	<i>Department/Project :26 NARO Internal Audit</i>
Reason: The Travel arrangement was referred to 1st week of April due to abrupt special meeting organized by the Office of the Auditor General which fell in the same week	
<i>Items</i>	
18,052,392.000 UShs	227001 Travel inland
Reason: The Travel arrangement was referred to 1st week of April due to abrupt special meeting organized by the Office of the Auditor General which fell in the same week	
1.355 Bn Shs	<i>Department/Project :1619 Retooling of National Agricultural Research Organization</i>

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Reason: All physical training was replaced by online virtual training, thus a reduction in hall hire costs though. The results were not as good as compared to physical attendance.

The contractors for the Wide Area Network planned for NARO institutes in the northern region had some technical issues to rectify before submitting the invoices for payment by the end of the quarter.

Items

409,127,972.000 UShs	221008 Computer supplies and Information Technology (IT)	
	Reason: The contractors for the Wide Area Network planned for NARO institutes in the northern region had some technical issues to rectify before submitting the invoices for payment by the end of the quarter.	
248,895,547.000 UShs	281504 Monitoring, Supervision & Appraisal of Capital work	
	Reason: Referred to next quarter.	
177,708,478.000 UShs	221003 Staff Training	
	Reason: - Physical training were by replaced Online virtual trainings, thus a reduction in hall hire costs though but results were not as good as compared to physical attendance	
122,904,527.000 UShs	312102 Residential Buildings	
	Reason: The constructors did not submit their reports in time	
119,225,600.000 UShs	225001 Consultancy Services- Short term	
	Reason: Two invoices from consultants were not paid due to their supplier information were not successfully captured under IFMS	

(ii) Expenditures in excess of the original approved budget

V2: Performance Highlights

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Table V2.1: Sub-SubProgramme Outcome and Outcome Indicators*

Sub-SubProgramme : 51 Agricultural Research			
Responsible Officer: Director General			
Sub-SubProgramme Outcome: Increased production and productivity of priority and strategic commodities			
Sub-SubProgramme Outcome Indicators	Indicator Measure	Planned 2021/22	Actuals By END Q3
Percentage of new varieties promoted and adopted by farmers and other users	Percentage	14%	10.5
Number of commercialisable technologies and innovations generated through competitive grant projects	Number	10	5
Increased production and productivity at some level resulting from utilization of improved technologies	Percentage	2%	1.5%

Table V2.2: Budget Output Indicators*

Performance highlights for the Quarter

A. NARO during the reporting period promoted technologies to the Uganda wider audience through various undertakings since the lock-down was lifted. NARO:

1. Coordinated and supported Implementation of the NARO seed Fair by NACRRI and UBIC. Through partnerships, 8 seed companies participated and 456 farmers accessed quality seed
2. Coordinated and supported institutes to conduct exhibitions during Parish Development model where 2650 participants were reached. A total of 21 technologies along 6 commodities were showcased.
3. Coordinated participation in the Eastern Agricultural Show. 1010 participants were reached and partnership linkages initiated. 41 technologies along 7 commodities were showcased. Standard Operating Procedures reviewed, pending printing.
4. Coordinated NARO participation in Harvest Money Expo at Kololo where 7687 Farmers and stakeholders were exposed to NARO technologies. 32 technologies along 8 commodities were showcased.
5. Supported private technology demonstrations and dissemination by cultural and religious groups including Tooro Kingdom, Kasagama farm, innoveight hub and catholic church magazine.
6. Developed a draft MOU between NARO and Movit for the commercialization of the coffee scrub
7. the orientation of the EGS working group and development of their workplan
8. 3 communities in Central Buganda and Greater Masaka Regions get to know about NARO technologies appropriate to them .
9. 10 Technologies disclosed under TDF assessed and different forms of IP applications are under drafting and development for filing
10. 3 IPMC meetings held(IPMC interface with MAAIF, Preparatory meeting for monitoring of seed companies, Meeting with breeders with key resolutions and decisions included; drafting of solicitor general letter for guidance on NARO variety licensing, communicate to PARIs about breeder seed bulking requirements and the streamlined procedure of access.
11. 1 Licence agreement between NARO and Advanta signed, MOU between NARO and Katebe farms processed; 1 expression of interest from Uganda prisons seed limited for partnership in foundation seed production received and being processed.
12. Monitored 6 NARO licensed Seed companies which included; NASECO, FICA, Ayellape Agro, Equator Seeds, Miika Albertine, Syova seeds.

B. NARO has strengthened the agricultural research capacity by:

13. Developing a draft Mentorship concept for to enhance capacity in product development
14. Developing the first draft of the partnership guidelines.
15. Guidelines for implementing the knowledge management policy validated. The Knowledge management was typeset, designed and first review conducted
16. Content for three (Banana, Fish and Livestock) commodities co-created, illustrated and designed for review. Eleven content packages for five commodities (Maize, Dairy, Rice, Cassava and Rice) uploaded on the NARO information hub

C. NARO has been Enhancing the application of ICT, and integrating a considerable range of ICT in research.

17. A wide Area network is being rolled-out to PARIs. As part of lesson learnt from the lock down, and a response to mitigate future covid-like

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events. The WAN is build on top of the optical fiber installation by NITA-U.

18. NARO is digitizing the document collections to improve access to corporate institutional memory.

D. There are key achievements at the PARIs abridged as follows:

Crops (abridged report)

19. Submitted to VRC, 3 bush and 3 climber beans varieties for DUS test

20. 4 earlier submitted candidate varieties re-submitted.

21. 2 new rice varieties submitted to VRC;

22. 4 earlier submitted rice varieties released

23. NACRRI produced 2.01M of bean breeder seed; developed and evaluated sets of combinations of soil fertilisation and pest and diseases management control regimes to enable increased bean yields

24. Five (5) varietal technologies (NAROBAN 1,2,3 6 and 7) delivered to uptake pathways using 48 demonstration field

25. Two tomato production practices developed.

26. 4 farmer groups supported in vegetable & fruit production in Ngeng, wadelai, Torchi and Doho II

27. 2 earlier submitted maize candidate varieties re-submitted

28. 6 platforms were supported (4 rice, 2 bean) Doho, Olweny Irrigation Scheme, kamwenge and Kigumba. Two beans

29. Five (2) innovations: i) Demos 2), ii) On Farm Trials (OFT-2), iv) Farmer Groups (FGs 2), & v) Early Generation Seeds (EGSs-10 acres of improved varieties) established

Coffee

30. 2 candidate Arabica genotypes promising for pest resistance identified. 1 candidate Arabica coffee variety trial site in Zombo rehabilitated. Coffee samples from 22 (17 Elgon A plus 5 checks) Arabica genotypes in advanced trials at Bugusege and BugiZARDI harvested and processed for quality analysis.

31. 2 coffee by-products developed and are under shelf-stability studies

32. 48 coffee samples were submitted to UCDA for quality analysis

33. High Performance Liquid Chromatograph (HPLC) equipment installed and operationalized

34. Prototypes of coffee lotions and creams produced with extracts from leaves, green cherries and red-ripe cherries, ready for market testing

35. Conducted market-taste study for coffee-infused yoghurt prototype. 90% of the respondents preferred the coffee-infused yoghurt to any other yoghurt on market

36. Developed 4 Models of potential packaging materials for coffee byproducts, each model with 2 volume adjustments

37. Mother gardens at Bugusege maintained for quality production of Arabica seed

38. 30 cocoa farmers and extension workers trained in cocoa GAPs at outreach events held at NaCORI-Kituza and NaCORI participating exhibitions.

Fisheries

39. 60 barbus broodstock procured for onstation conditioning; 158,885 quality sex reversed tilapia fry produced and availed to farmers; 28,310 mixed sex tilapia; 17,060 catfish, and 10,800 mirror carp

40. Fisheries potential of lake Victoria and Lake Kyoga established

41. Updated the NARO Cage Aquaculture Application (App).

42. Two cage stocked with 15,000 fish for growout; two additional grow out cages with 12,000 fish stocked and one cage facility maintained.

43. Feed mill, two (02) Hatcheries, forty (40) ponds, office Premises and hostel facilities well managed and maintained..

Forestry

44. Draft training content developed and outreach strategy drafted.

45. One value added non-wood product (treated bamboo poles) produced (3,400 bamboo poles treated with borax:boric acid preservative). One value added wood product (Glulam tables) developed and physical and mechanical properties determined.

46. 100 kg of bamboo charcoal produced from 2 species, i.e. Bambusa vulgaris (50 kg) and Dendrocalamus giganteus (50 kg).

47. 5 acres of Avocado genebank maintained; Summary report on growth performance and fruiting characteristics of genotypes in Avocado germplasm bank.

48. 16 acres of shea butter tree BSOs in Ngetta ZARDI & NaSARRI maintained; Report on the growth performance of the genotypes in the shea tree BSOs.

49. NaFORRI is establishing the know-what, germplasm and tree improvement of the jackfruit. Preliminary data on seed and seedling characteristics of the different ethno-varieties generated; 2) Diversity of jackfruit determined.

Livestock

50. Assorted livestock feed produced 20 tons of soya, 30 tons of maize produced, 2) 400 tons of silage produced (20 acres) 3) 54,750kg of hay (20 acres) produced;4) 1.5 MT of forage seed produced "

51. In Ant-tick vaccine research, responses to scientific audit queries on the On-station vaccine clinical trial were reviewed and results were satisfactory. The results were presented to Project PI and PL by UNCST. Two meetings for supervision of the NARO Vaccine Production Facility

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were successfully held by the NARO engineer, Project contractor and PIs of ASF, FMD and Anti-tick vaccine project. NBC granted a conditional biosafety approval for a confined field trial (CFT). 4) Protocols for CFT were submitted to NDA for review.

52. NALIRRI is producing fertilised eggs of elite indigenous chicken to be availed to hatcheries to enable production and supply of elite day old chicks

53. 1080 eggs hatched; 510 chicks hatched

54. 75 low cost embryos produced

55. NALIRRI is improving the African goat through community based breeding programs by strengthening village breeding programs in Uganda, Masisindi and Nepal.

NARL

56. One unit of NARORAMP2 under installation (60% complete) in Mirongo village, Harugongo sub-county, Kabarole district for vegetable production and fish farming

57. Biomass of 3 different potential candidates for formulation into high energy briquettes have been prepared for Galvanic and thermal analyses

58. 2 potential smoked fish processors (Oporogo fish and sea food enterprises based at Bwebajja, Wakiso district; Herbert Katabalwamiira, Katabi, Wakiso district) identified

59. 4 of the earlier SMEs (Kwer Kabu Acaye womens group at Dei landing site, Fish farming clusters, MIMUK, Kiyindi women fish processors association) were further guided on proper use of the kilns and processing smoked fish

60. 2nd prototype of power tiller weeder fabricated and ready for evaluation

61. Design and working drawings of low horse power hand weeder and procurement of fabrication materials "

62. "Second set of general information on soils and cropping pattern for the Mobuku irrigation scheme in 5 divisions (Divisions 8, 9, 10, 11 and 12). The average nutrient levels were: K 0.29Cmols/kg, N 0.15%, P 40.05mg/kg, pH 5.16, EC 145.9µs/cm, Organic manure 2.6%, Ca

6.05Cmols/kg, Mg 0.76Cmols/kg

63. Partial information on canopy of Longe 10 maize variety on the host irrigation scheme divisions (8,9,10,11 and 12). Average canopy cover: 18% on experimental plots at 3weeks and 15% on control plots at same crop age "

64.. Established 5 experimental plots for longe 10 maize variety in Mobuuku irrigation scheme at divisions 8,9,10,11 and 12. "

V3: Details of Releases and Expenditure

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

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
Sub-SubProgramme 51 Agricultural Research	110.61	77.96	72.37	70.5%	65.4%	92.8%
<i>Class: Outputs Provided</i>	79.32	57.75	54.51	72.8%	68.7%	94.4%
015101 Generation of agricultural technologies	16.63	10.95	9.92	65.8%	59.7%	90.7%
015102 Research extension interface promoted and strengthened	4.12	2.55	2.36	61.9%	57.3%	92.6%
015103 Internal Audit	0.18	0.09	0.07	50.0%	40.0%	79.9%
015104 Agricultural research capacity strengthened	58.40	44.17	42.15	75.6%	72.2%	95.4%
<i>Class: Outputs Funded</i>	1.84	0.92	0.89	50.0%	48.4%	96.9%
015151 Payments to International Organisations (CGIAR, ASARECA, WARDA)	1.84	0.92	0.89	50.0%	48.4%	96.9%
<i>Class: Capital Purchases</i>	29.14	18.99	16.67	65.1%	57.2%	87.8%
015172 Government Buildings and Administrative Infrastructure	25.33	15.37	13.65	60.7%	53.9%	88.8%
015176 Purchase of Office and ICT Equipment, including Software	0.11	0.08	0.08	73.6%	73.6%	100.0%
015177 Purchase of Specialised Machinery & Equipment	3.51	3.34	2.86	95.2%	81.5%	85.6%

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<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
015178 Purchase of Office and Residential Furniture and Fittings	0.20	0.20	0.08	97.5%	40.7%	41.7%
Class: Arrears	0.30	0.30	0.30	100.0%	100.0%	100.0%
015199 Arrears	0.30	0.30	0.30	100.0%	100.0%	100.0%
Total for Vote	110.61	77.96	72.37	70.5%	65.4%	92.8%

Table V3.2: 2021/22 GoU Expenditure by Item

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
Class: Outputs Provided	79.32	57.75	54.51	72.8%	68.7%	94.4%
211102 Contract Staff Salaries	34.23	25.67	25.67	75.0%	75.0%	100.0%
211103 Allowances (Inc. Casuals, Temporary)	3.06	2.46	2.37	80.4%	77.3%	96.1%
212101 Social Security Contributions	3.42	3.33	2.57	97.3%	75.0%	77.1%
213001 Medical expenses (To employees)	1.00	0.83	0.83	83.1%	83.1%	100.0%
213002 Incapacity, death benefits and funeral expenses	0.91	0.58	0.58	64.2%	64.2%	100.0%
213004 Gratuity Expenses	8.56	6.42	6.42	75.0%	75.0%	100.0%
221001 Advertising and Public Relations	0.79	0.65	0.57	82.0%	72.2%	88.0%
221002 Workshops and Seminars	1.94	0.00	0.00	0.0%	0.0%	0.0%
221003 Staff Training	0.86	0.70	0.53	81.6%	61.0%	74.7%
221004 Recruitment Expenses	0.09	0.09	0.08	100.0%	94.0%	94.0%
221006 Commissions and related charges	0.09	0.05	0.04	61.5%	42.8%	69.7%
221007 Books, Periodicals & Newspapers	0.06	0.04	0.04	64.0%	59.9%	93.6%
221008 Computer supplies and Information Technology (IT)	1.58	1.03	0.62	65.0%	39.0%	60.1%
221009 Welfare and Entertainment	0.49	0.35	0.31	71.2%	63.5%	89.3%
221011 Printing, Stationery, Photocopying and Binding	0.63	0.43	0.43	67.8%	67.4%	99.5%
221012 Small Office Equipment	0.03	0.02	0.02	64.4%	59.3%	92.1%
221016 IFMS Recurrent costs	0.18	0.14	0.07	74.6%	38.3%	51.4%
221017 Subscriptions	0.07	0.06	0.06	82.4%	82.4%	100.0%
222001 Telecommunications	0.21	0.13	0.10	63.1%	46.8%	74.1%
222002 Postage and Courier	0.01	0.01	0.00	55.3%	32.8%	59.3%
222003 Information and communications technology (ICT)	0.96	0.62	0.54	64.6%	55.9%	86.5%
223002 Rates	0.05	0.05	0.00	100.0%	0.0%	0.0%
223004 Guard and Security services	0.30	0.22	0.21	72.8%	70.5%	96.9%
223005 Electricity	0.57	0.38	0.36	65.9%	63.6%	96.5%
223006 Water	0.11	0.07	0.07	65.5%	65.5%	100.0%
224001 Medical Supplies	1.45	1.20	1.20	82.9%	82.2%	99.3%
224004 Cleaning and Sanitation	0.28	0.21	0.21	75.8%	75.8%	100.0%
224005 Uniforms, Beddings and Protective Gear	0.09	0.07	0.07	82.7%	82.7%	100.0%

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224006 Agricultural Supplies	7.40	4.51	3.87	60.9%	52.3%	85.8%
225001 Consultancy Services- Short term	0.66	0.49	0.37	75.0%	56.9%	75.8%
226001 Insurances	0.13	0.07	0.01	51.8%	8.2%	15.8%
226002 Licenses	0.19	0.11	0.10	57.8%	52.4%	90.7%
227001 Travel inland	5.11	4.00	3.56	78.3%	69.7%	89.0%
227002 Travel abroad	0.03	0.00	0.00	0.0%	0.0%	0.0%
227004 Fuel, Lubricants and Oils	1.56	1.15	1.08	73.9%	69.5%	94.1%
228001 Maintenance - Civil	0.62	0.43	0.42	70.0%	67.9%	97.0%
228002 Maintenance - Vehicles	0.87	0.64	0.63	72.7%	72.1%	99.2%
228003 Maintenance – Machinery, Equipment & Furniture	0.57	0.44	0.44	78.3%	77.3%	98.7%
228004 Maintenance – Other	0.04	0.02	0.02	57.5%	48.8%	84.8%
273102 Incapacity,death benefits and funeral expenses	0.10	0.07	0.04	68.2%	39.5%	57.9%
Class: Outputs Funded	1.84	0.92	0.89	50.0%	48.4%	96.9%
262201 Contributions to International Organisations (Capital)	1.80	0.91	0.89	50.6%	49.6%	98.0%
264101 Contributions to Autonomous Institutions	0.04	0.01	0.00	25.0%	0.0%	0.0%
Class: Capital Purchases	29.14	18.99	16.67	65.1%	57.2%	87.8%
281504 Monitoring, Supervision & Appraisal of Capital work	1.40	1.04	0.79	74.4%	56.6%	76.1%
312101 Non-Residential Buildings	20.67	12.79	11.50	61.9%	55.6%	89.9%
312102 Residential Buildings	1.89	1.13	1.01	59.6%	53.1%	89.1%
312104 Other Structures	1.36	0.42	0.35	30.4%	25.8%	84.7%
312202 Machinery and Equipment	2.31	2.14	1.76	92.7%	76.2%	82.2%
312203 Furniture & Fixtures	0.20	0.20	0.08	97.5%	40.7%	41.7%
312213 ICT Equipment	0.11	0.08	0.08	73.6%	73.6%	100.0%
312214 Laboratory Equipments	1.20	1.20	1.10	100.0%	91.7%	91.7%
Class: Arrears	0.30	0.30	0.30	100.0%	100.0%	100.0%
321613 Telephone arrears (Budgeting)	0.14	0.14	0.14	100.0%	100.0%	100.0%
321614 Electricity arrears (Budgeting)	0.16	0.16	0.16	100.0%	100.0%	100.0%
Total for Vote	110.61	77.96	72.37	70.5%	65.4%	92.8%

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

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
Sub-SubProgramme 0151 Agricultural Research	110.61	77.96	72.37	70.5%	65.4%	92.8%
<i>Departments</i>						
01 Headquarters	51.67	39.54	38.25	76.5%	74.0%	96.8%
07 National Crops Resources Research Institute	0.24	0.15	0.15	63.3%	63.3%	100.0%
08 National Fisheries Resources Research Institute	0.33	0.22	0.22	65.4%	65.4%	100.0%
09 National Forestry Resources Research Institute	0.23	0.15	0.15	63.9%	63.9%	100.0%
10 National Livestock Resources Research	2.24	1.34	1.34	60.0%	60.0%	100.0%

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11 National Semi arid Resources Research	0.44	0.27	0.27	62.0%	62.0%	100.0%
12 National Laboratories Research	1.19	0.71	0.71	59.5%	59.5%	100.0%
13 Abi ZARDI	0.19	0.13	0.13	67.0%	67.0%	100.0%
14 Bulindi ZARDI	0.20	0.13	0.13	66.3%	66.3%	100.0%
15 Kachwekano ZARDI	0.19	0.13	0.13	67.1%	67.1%	100.0%
16 Mukono ZARDI	0.35	0.21	0.21	59.3%	59.3%	100.0%
17 Ngetta ZARDI	0.20	0.13	0.13	66.4%	66.4%	100.0%
18 Nabium ZARDI	0.20	0.13	0.13	66.3%	66.3%	100.0%
19 Mbarara ZARDI	0.19	0.13	0.13	67.0%	67.0%	100.0%
20 Buginyaya ZARDI	0.35	0.21	0.21	59.3%	59.3%	100.0%
21 Rwebitaba ZARDI	0.49	0.31	0.31	62.7%	62.7%	100.0%
26 NARO Internal Audit	0.18	0.09	0.07	50.0%	40.0%	79.9%
27 National Coffee Research Institute	0.25	0.16	0.16	63.1%	63.1%	100.0%
<i>Development Projects</i>						
1560 Relocation and Operationalisation of the National Livestock Resources Research Institute (NALIRRI)	5.00	3.31	3.31	66.2%	66.1%	99.9%
1619 Retooling of National Agricultural Research Organization	46.47	30.52	26.23	65.7%	56.4%	85.9%
Total for Vote	110.61	77.96	72.37	70.5%	65.4%	92.8%

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

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% Budget Released	% Budget Spent	% Releases Spent
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Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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Sub-SubProgramme: 51 Agricultural Research

Departments

Department: 01 Headquarters

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

		Item	Spent
2 Impact studies conducted on NARO rice & sorghum, Competitive Grants Scheme (CGS), 4 physical and budget performance monitoring reports generated	Two impact studies on maize and bean being finalised in the PARIs. Preliminary findings indicated that Results indicated that 79.3% and 85% of farmers were using improved NARO maize and bean varieties, respectively.	211103 Allowances (Inc. Casuals, Temporary)	13,627
1 Annual performance review conducted,		221006 Commissions and related charges	13,980
1 Statistical abstract FY2021/22 developed		227001 Travel inland	42,500
	- Two performance monitoring reports generated to inform management decisions on on-going research progress.		
	- One draft NARO statistical abstract FY 2021/22 developed but not yet completed.		

Reasons for Variation in performance

Work still on-going

Total	70,107
Wage Recurrent	0
Non Wage Recurrent	70,107
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
2 web-based technology promotion Systems developed, 8 technologies protected, 12 IPMC engagements & 12 IP awareness policy coordinated, 8 Technology licensing agreements signed and 8 Business plans & proposals, develop 3 digital based technology platforms	- One web-based technology promotion System developed.	Item	Spent
	- 3 IPMC meetings held(IPMC interface with MAAIF.	221007 Books, Periodicals & Newspapers	3,843
	- Preparatory meeting for monitoring of seed companies, Meeting with breeders with key resolutions and decisions included; drafting of solicitor general letter for guidance on NARO variety licensing, communicate to PARIs about breeder seed bulking requirements and the streamlined procedure of access.	221011 Printing, Stationery, Photocopying and Binding	50,000
	- One licence agreement between NARO and Advanta signed, MOU between NARO and Katebe farms processed; 1 expression of interest from Uganda prisons seed limited for partnership in foundation seed production received and being processed.	221012 Small Office Equipment	230
	- 03 technologies were identified to have IP potential and are undergoing assessment and drafting	222001 Telecommunications	16,170
	- One patent application drafted and ready for filing 2 more seed companies recommended for license to commercialize NARO plant varieties.	222002 Postage and Courier	300
	- 02 companies engaged for signing of a licence agreement that is Advant international.	223005 Electricity	13,177
	- Records management information system to support of administration activities developed.	223006 Water	10,103
		227001 Travel inland	15,720

Reasons for Variation in performance

Work still on going for developing the technology promotion System, technologies protected, IPMC engagements & IP awareness policy coordinated, and Technology licensing agreements

Total	109,543
Wage Recurrent	0
Non Wage Recurrent	109,543
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

	Item	Spent
10 NARO staff supported for MScs and PhDs, 4000 acres of NARO titled, strengthened compliance to 6 international organizations, Coordinated Research oversight in the 16 PARIS, Security enhanced in the 16 NARO PARIs assets and 16 PARI facilities maintained	- Coordinated Research oversight in the 16 PARIs strengthened to support development of research for products to stimulate industries, Security enhanced in the 16 NARO PARIs,	211102 Contract Staff Salaries 25,674,922
	- 1 routine mission conducted on research facilities in the 16 Public research institutes.	211103 Allowances (Inc. Casuals, Temporary) 117,610
	- Human resource of 910 staff managed and maintained by . paying staff salaries for the months of January-March 2022.	212101 Social Security Contributions 2,567,492
	- And social security contribution for 901 staff for the months of January - March 2022 remitted to NSSF.	213001 Medical expenses (To employees) 830,627
	- Annual subscription paid for 30 staff who belong to professional bodies.	213002 Incapacity, death benefits and funeral expenses 578,000
	76 NARO staff competencies enhanced through long term and short term training. (i.e. 01 PHD, 01 MSC, 01 in logistics and transport (CILT), 03 NARO staffs on effective office management; 14 staffs on transformational human resource management; officers; 20 on Procurement Management; 03 NARO Accountants for professional development fees; 17 Internal Auditors in professional development; 11 NARO technicians in experimental SOPs and data management	213004 Gratuity Expenses 6,418,730
	- Professional development fees for over 40 NARO staff (Federation of Uganda Employers)	221001 Advertising and Public Relations 4,463
	- Professional development fees for 06 NARO Accountants in ACCA.	221006 Commissions and related charges 21,328
	Professional development fees for TWO NARO Administrative professionals.	221008 Computer supplies and Information Technology (IT) 4,628
	- professional development in Information Technology. 01 student.	221009 Welfare and Entertainment 186,756
	500 acres of NARO titled, strengthened compliance to 6 international organizations,	221011 Printing, Stationery, Photocopying and Binding 8,201
	Physical resources (office buildings, vehicles, compounds) and utilities secured, functional and managed effectively and efficiently.	221016 IFMS Recurrent costs 160
	Financial resources managed, and monitored the fiduciary responsibilities of the various actors in the PARIs.	222001 Telecommunications 37,384
		222003 Information and communications technology (ICT) 24,497
		223004 Guard and Security services 84,221
		223005 Electricity 23,332
		223006 Water 1,000
		224001 Medical Supplies 110,092
		224004 Cleaning and Sanitation 97,556
		224005 Uniforms, Beddings and Protective Gear 50,000
		224006 Agricultural Supplies 235,384
		227001 Travel inland 87,833
		227004 Fuel, Lubricants and Oils 254,815
		228001 Maintenance - Civil 45,283
		228002 Maintenance - Vehicles 218,974
		228003 Maintenance – Machinery, Equipment & Furniture 63,539
		228004 Maintenance – Other 6,195
		273102 Incapacity, death benefits and funeral expenses 23,300

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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Reasons for Variation in performance

	Total	37,776,324
	Wage Recurrent	25,674,922
	Non Wage Recurrent	12,101,402
	Arrears	0
	<i>AIA</i>	0

Arrears

Budget Output: 99 Arrears

Item	Spent
321613 Telephone arrears (Budgeting)	137,926
321614 Electricity arrears (Budgeting)	160,000

Reasons for Variation in performance

	Total	0
	Wage Recurrent	0
	Non Wage Recurrent	0
	Arrears	297,926
	<i>AIA</i>	0
	Total For Department	37,955,974
	Wage Recurrent	25,674,922
	Non Wage Recurrent	12,281,052
	Arrears	297,926
	<i>AIA</i>	0

Departments

Department: 07 National Crops Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

17 varieties for food and nutrition security developed and submitted to the varieties release committee	One pre-release meeting conducted .	Item	Spent
	- Submitted to VRC, 3 bush and 3 climber beans varieties for DUS test.	211103 Allowances (Inc. Casuals, Temporary)	32,986
	- 4 earlier submitted candidate varieties re-submitted.		
	- 2 new rice varieties submitted to VRC.		
	4 earlier submitted rice varieties released.		

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
		Total	32,986
		Wage Recurrent	0
		Non Wage Recurrent	32,986
		Arrears	0
		<i>AIA</i>	0

Budget Output: 02 Research extension interface promoted and strengthened

16 technologies delivered to uptake path ways for increased production and productivity	2 tons of quality breeder maize seed produced (of six varieties) .	Item	Spent
	8 tons of foundation bean seed harvested ready for delivery of 5 varieties).	221001 Advertising and Public Relations	2,520
	1 ton of vegetative planting materials ready for farmers (two cassava, three sweet potato, three citrus seedlings)		
	- Multiplication gardens established for various crops: 480 TRICOTs, 75 OFTs (sweetpotato), 26 FGs (18 sweetpotato & 8 cassava), 26 demos (20 sweetpotato & 6 cassava), 41 acres (6 sweetpotato & 35 cassava)		

Reasons for Variation in performance

	Total	2,520
	Wage Recurrent	0
	Non Wage Recurrent	2,520
	Arrears	0
	<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
1) Three Bio-sciences laboratories maintained.	1) One Bio-sciences laboratories maintained.	Item	Spent
2) Four on-station field research facilities maintained.	2) Four on-station field research facilities (2 screen house and 2 tissue culture labs.) maintained.	211103 Allowances (Inc. Casuals, Temporary)	2,520
3. Six Crop production facilities maintained.	3. One Crop production facility maintained to create enabling environment for Agriculture research Physical resources (offices, laboratories, field machinery, office equipment) maintained and fully functional	221008 Computer supplies and Information Technology (IT)	5,032
		221009 Welfare and Entertainment	6,040
		221011 Printing, Stationery, Photocopying and Binding	6,300
		222001 Telecommunications	5,040
		223004 Guard and Security services	7,560
		223005 Electricity	25,200
		224004 Cleaning and Sanitation	5,040
		226001 Insurances	806
		227001 Travel inland	12,635
		227004 Fuel, Lubricants and Oils	18,900
		228002 Maintenance - Vehicles	20,160
		228003 Maintenance – Machinery, Equipment & Furniture	3,780

Reasons for Variation in performance

Total	119,013
Wage Recurrent	0
Non Wage Recurrent	119,013
Arrears	0
AIA	0
Total For Department	154,520
Wage Recurrent	0
Non Wage Recurrent	154,520
Arrears	0
AIA	0

Departments

Department: 08 National Fisheries Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Sixteen thousand five hundred brood stock of fisheries resources acquired for sustainable seed production and Breeding that is; Ten thousand (10,000) Tilapia, Five thousand (5,000) catfish, One thousand (1,000) mirror carp and Five hundred (500) Barbus.	60 barbus broodstock procured for onstation conditioning; 158,885 quality sex reversed tilapia fry produced and availed to farmers; 28,310 mixed sex tilapia; 17,060 catfish, and 10,800 mirror carp	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	8,314
		224006 Agricultural Supplies	9,697
		227001 Travel inland	4,843
		227004 Fuel, Lubricants and Oils	4,477

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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Only four out of 10 cages were available for stocking. Others were still under rehabilitation.

Total	27,330
Wage Recurrent	0
Non Wage Recurrent	27,330
Arrears	0
<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

4 fish laboratories and two aquarium facilities maintained and operationalised. 1 cage research facility maintained and operationalised. Premises and assets protected and	One fish laboratory and one aquarium maintained & operationalized, One cage research facility maintained and operationalized. Salaries for 25 contract staff paid ;Staff welfare items procured; fuel for administrative activities procured; 08 Institute vehicles and equipment maintained; information leaflets/brochures/ booklets produced;	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	26,239
		221001 Advertising and Public Relations	8,524
		221007 Books, Periodicals & Newspapers	4,709
		221008 Computer supplies and Information Technology (IT)	1,327
		221009 Welfare and Entertainment	6,406
		221011 Printing, Stationery, Photocopying and Binding	7,979
		222001 Telecommunications	3,885
		222003 Information and communications technology (ICT)	12,437
		223004 Guard and Security services	11,286
		223005 Electricity	15,445
		223006 Water	7,913
		224004 Cleaning and Sanitation	7,961
		226001 Insurances	1,056
		227001 Travel inland	20,927
		227004 Fuel, Lubricants and Oils	16,339
		228001 Maintenance - Civil	6,634
		228002 Maintenance - Vehicles	20,105
		228003 Maintenance – Machinery, Equipment & Furniture	10,271

Reasons for Variation in performance

Total	189,438
Wage Recurrent	0
Non Wage Recurrent	189,438
Arrears	0
<i>AIA</i>	0
Total For Department	216,768
Wage Recurrent	0
Non Wage Recurrent	216,768

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
		Arrears	0
		AIA	0

Departments

Department: 09 National Forestry Resources Research Institute

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

500 farmers exposed to salient tree-crop interactions different farming systems 250 Stakeholder equipped with best agronomic practices for production of quality avocado and annona germplasm	- Training content developed and outreach strategy drafted. - Demonstrations designed and appropriate sites identified in Kifu RF and prepared.. - 56,000 clonal eucalyptus cuttings harvested from mother gardens;19,600 high quality clonal eucalypt plantlets raised; planted out 2,867 plantlet of GC 540 and GC 796 in the mother garden	Item	Spent
		221001 Advertising and Public Relations	1,916
		221007 Books, Periodicals & Newspapers	1,533
		221008 Computer supplies and Information Technology (IT)	3,194

Reasons for Variation in performance

Funds not available for training farmer.

Total	6,643
Wage Recurrent	0
Non Wage Recurrent	6,643
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Institute capacity to support agricultural research and innovations enhanced through routine maintenance of vital research support components (infrastructure, equipment, machinery, vehicles, computers & ICT); re-tooling and guidance of staff	- Provision of Security/safety for Institute premises, assets & trials. - Refreshments to 69 staff members & 30 visitors. Institute capacity to support agricultural research and innovations enhanced through: - Routine maintenance of 2 Office blocks, 1 conference Hall, 2 field vehicles 1 staff van, 1 generator, 1 water pump, 5 computers, 10,000 square meters of compound.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	13,606
		221003 Staff Training	2,555
		221009 Welfare and Entertainment	3,833
		221011 Printing, Stationery, Photocopying and Binding	6,387
		222001 Telecommunications	1,278
		222002 Postage and Courier	511
		222003 Information and communications technology (ICT)	12,043
		223004 Guard and Security services	12,774
		223005 Electricity	25,494
		224004 Cleaning and Sanitation	12,052
		224005 Uniforms, Beddings and Protective Gear	1,278
		227001 Travel inland	10,221
		227004 Fuel, Lubricants and Oils	19,426
		228001 Maintenance - Civil	5,749
		228002 Maintenance - Vehicles	11,333
		228003 Maintenance – Machinery, Equipment & Furniture	4,471

Reasons for Variation in performance

Total	143,007
Wage Recurrent	0
Non Wage Recurrent	143,007
Arrears	0
AIA	0
Total For Department	149,650
Wage Recurrent	0
Non Wage Recurrent	149,650
Arrears	0
AIA	0

Departments

Department: 10 National Livestock Resources Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
One anti-tick candidate vaccine molecule validated in various agro-ecological zones of Uganda	Progress on anti-tick vaccine:	Item	Spent
One broad-spectrum chimeric anti-tick vaccine formulated & evaluated	1) Responses to Scientific audit queries on the On-station vaccine clinical trial were reviewed and results were satisfactory. The results were presented to Project PI and PL by UNCST.	211103 Allowances (Inc. Casuals, Temporary)	100,720
Two FMD candidate vaccines evaluated. Four African swine fever candidate vaccine tests		221003 Staff Training	56,116
		221017 Subscriptions	12,605
		222003 Information and communications technology (ICT)	45,513
	2) Two meetings for supervision of the NARO Vaccine Production Facility were successfully held by the NARO engineer, Project contractor and PIs of ASF, FMD and Anti-tick vaccine project.	223004 Guard and Security services	9,336
		223005 Electricity	84,455
		224001 Medical Supplies	259,390
		224004 Cleaning and Sanitation	21,774
	3) NBC granted a conditional biosafety approval for a confined field trial (CFT).	224005 Uniforms, Beddings and Protective Gear	17,960
		224006 Agricultural Supplies	214,476
	4) Protocols for CFT were submitted to NDA for review.	225001 Consultancy Services- Short term	29,175
		227001 Travel inland	53,682
	5) Continued with optimization of conditions for amplification of p67 T.parva antigens.	227004 Fuel, Lubricants and Oils	70,020
		228001 Maintenance - Civil	46,680
		228002 Maintenance - Vehicles	81,690
	6) Anti-tick Vaccine field protocol application reviewed and Endorsed by Institutional Animal Care and Use Committee (IACUC).	228003 Maintenance – Machinery, Equipment & Furniture	91,610
	7) 3000 doses of the Anti-tick vaccine produced and awaits clearance from UNCST.		
	8) 83 samples collected from 2 districts, screened them microscopically and have commenced on the DNA extraction		
	9) Cattle Trial farms available for field trial;		
	10) Approved consent forms availed for use by field trial team;		
	Progress on FMD vaccine:		
	1) The P67 T. Parva gene for 15 ECF positive samples from Pader and 11 from Kiryandongo district has been amplified by PCR;		
	2) field workshops have been carried out in 11 districts and a total of 418 samples collected, out of which 155 screened microscopically showed positive and being evaluated by molecular means;		

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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NARO engaged the national Authorities in vaccine development i.e NBC, UNCST e.t.c. NARO sought the necessary approvals before further progress was conducted.

Work is still on going.

Total	1,195,200
Wage Recurrent	0
Non Wage Recurrent	1,195,200
Arrears	0
<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

	Item	Spent
3 livestock laboratories and one forage conservation facility maintained.	1) Three livestock laboratories and one forage conservation facility maintained.	211103 Allowances (Inc. Casuals, Temporary) 47,216
Herbarium and two on-station field research facilities maintained.	2) Two on-station field research facilities maintained.	221001 Advertising and Public Relations 4,786
10 research and production facilities maintained.	221007 Books, Periodicals & Newspapers 638	
	3) Four livestock production facilities maintained.	221008 Computer supplies and Information Technology (IT) 6,381
		221009 Welfare and Entertainment 9,571
	4) Six research handling facilities maintained.	221011 Printing, Stationery, Photocopying and Binding 10,209
		221012 Small Office Equipment 2,757
	5) Physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional	222001 Telecommunications 2,552
		223005 Electricity 3,828
		224004 Cleaning and Sanitation 5,743
		226001 Insurances 817
		227001 Travel inland 7,687
		227004 Fuel, Lubricants and Oils 12,761
		228001 Maintenance - Civil 3,541
		228002 Maintenance - Vehicles 11,485
		228003 Maintenance – Machinery, Equipment & Furniture 4,275
		273102 Incapacity, death benefits and funeral expenses 12,761

Reasons for Variation in performance

Total	147,005
Wage Recurrent	0
Non Wage Recurrent	147,005
Arrears	0
<i>AIA</i>	0
Total For Department	1,342,205
Wage Recurrent	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
		Non Wage Recurrent	1,342,205
		Arrears	0
		AIA	0

Departments

Department: 11 National Semi arid Resources Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

	Item	Spent
15 sesame lines evaluated, 30 accessions of cowpea and 20 of pigeon pea characterized, one suitable soil & water conservation strategy generated & recommended for cotton production, Two farmer preferred cotton lines with industrial attributes identified f	Progress on sesame: Five multi-locational trials were established and trials monitored in Serere, Arua, Lira, Kitgum and Mayuge. Trials were monitored and field data collected.	211103 Allowances (Inc. Casuals, Temporary) 26,515 224006 Agricultural Supplies 30,174 227001 Travel inland 63,669 227004 Fuel, Lubricants and Oils 28,040
	Progress on cotton: 16 cotton lines planted in NaSARRI were monitored and data collection on-going	
	Seven cotton varieties- 4 of them from Zimbabwe (SZ 931Y, QM 301, MS-2, MS-1), and 3 of them from Uganda (BPA-2015 A, BPA-2015 B, and BPA-2002) were established and monitored and data collection on-going at NaSARRI.	

Reasons for Variation in performance

Work on-going

Total	148,397
Wage Recurrent	0
Non Wage Recurrent	148,397
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
1 Biopesticides developed and protocols produced 14 acres of compound mowed and 12 office blocks cleaned Four dissemination workshops conducted, 12 committee meetings held	Progress on biopesticide: Morphologically identified species tested for their efficacy in the laboratory at 50ml / 100 ml /150ml/200mls per Ha. Between 150 -200mls are more promising 2. More pure cultures of bacterial and fungal isolates produced 14 acres of compound mowed and 3 office blocks maintained to create enabling environment for research One dissemination workshops conducted, 3 scientific committee meetings conducted to guide research	Item 211103 Allowances (Inc. Casuals, Temporary) 213002 Incapacity, death benefits and funeral expenses 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	Spent 17,432 5,099 5,099 3,825 11,198 7,649 8,924 2,549 7,649 12,748 2,550 7,649 761 10,897 8,149 10,199

Reasons for Variation in performance

Need for further efficacy testing to determine the best rate of application.

Only 3 meetings conducted vs the envisage 9 because of lack of funds to facilitated the committees.

Total	122,372
Wage Recurrent	0
Non Wage Recurrent	122,372
Arrears	0
AIA	0
Total For Department	270,768
Wage Recurrent	0
Non Wage Recurrent	270,768
Arrears	0
AIA	0

Departments

Department: 12 National Laboratories Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
3 Value added products from maize, beans, vegetables for commercialization developed. Propagation systems developed for two plant genetic resources, 2000 genotypes from banana Hybrid seed generated.	3 Value added product from maize, beans, vegetables for commercialization developed. Propagation systems developed for two plant genetic resources, 500 genotypes from banana Hybrid seed generated.	Item 211103 Allowances (Inc. Casuals, Temporary) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223005 Electricity 224004 Cleaning and Sanitation 224006 Agricultural Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture	Spent 58,684 758 3,322 583 9,520 874 127,318 60,648 5,412 700 1,749

Reasons for Variation in performance

- Work still on-going.
- Available resources (funds for materials and manpower) limited the scope of intended work.

Total	269,564
Wage Recurrent	0
Non Wage Recurrent	269,564
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Agriculture Research Information Education Communication material developed and disseminated.	An assortment of Agriculture Research Information Education Communication material developed and disseminated during 2 exhibitions..	Item 211103 Allowances (Inc. Casuals, Temporary) 221011 Printing, Stationery, Photocopying and Binding 224006 Agricultural Supplies 227001 Travel inland	Spent 11,100 8,520 126,900 24,500
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Reasons for Variation in performance

Total	171,020
Wage Recurrent	0
Non Wage Recurrent	171,020
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
'4 reaseach management committees conducted to guide research Procedure for application of procedures and polices Institution machinery and equipment maintained.	Research agenda strengthened with two research management committees conducted to guide research Institutional research machinery and equipment maintained.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221003 Staff Training 221007 Books, Periodicals & Newspapers 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Telecommunications 222002 Postage and Courier 223004 Guard and Security services 223005 Electricity 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture 228004 Maintenance – Other	Spent 56,049 10,905 5,500 2,798 12,935 10,989 10,490 2,914 2,160 294 20,867 26,844 27,769 35,312 5,280 24,805 6,735 3,788

Reasons for Variation in performance

Total	266,429
Wage Recurrent	0
Non Wage Recurrent	266,429
Arrears	0
AIA	0
Total For Department	707,013
Wage Recurrent	0
Non Wage Recurrent	707,013
Arrears	0
AIA	0

Departments

Department: 13 Abi ZARDI

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Two technologies generated for increased production and productivity Five innovations developed	<p>The two technologies generated included improved seed for rice, and soybean. And also progress Five innovations developed. 9.71 tons of foundation seed produced (rice-nerica 4-1708kg; soybean(maksoy 3N) 4700 kg;Maize (longe 5)-3300kgs).</p> <p>The innovations developed included cassava bread and cakes. cassava replacing wheat in bread and cakes. Cassava planting materials were developed and disseminated to farmers.</p> <p>The two farm Clinics held at ABI ZARDI that has so far attracted several stakeholders and eight different key commodities have been showcased their entire value chain. Lessons learnt will be scaled out to the PDM and other beneficiaries.</p>	<p>Item</p> <p>221001 Advertising and Public Relations</p> <p>221008 Computer supplies and Information Technology (IT)</p> <p>221011 Printing, Stationery, Photocopying and Binding</p>	<p>Spent</p> <p>8,046</p> <p>5,364</p> <p>5,364</p>

Reasons for Variation in performance

Total	18,773
Wage Recurrent	0
Non Wage Recurrent	18,773
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Four advisory committee and PARI directors forum, institute committee meetings and two 02) review and planning meetings held to guide research activities	Zonal research agenda strengthened by two advisory committee and PARI directors forum, institute committee meetings conducted.	<p>Item</p> <p>211103 Allowances (Inc. Casuals, Temporary)</p> <p>221008 Computer supplies and Information Technology (IT)</p> <p>221011 Printing, Stationery, Photocopying and Binding</p> <p>222001 Telecommunications</p> <p>223004 Guard and Security services</p> <p>223005 Electricity</p> <p>223006 Water</p> <p>224004 Cleaning and Sanitation</p> <p>224006 Agricultural Supplies</p> <p>226001 Insurances</p> <p>227001 Travel inland</p> <p>227004 Fuel, Lubricants and Oils</p> <p>228001 Maintenance - Civil</p> <p>228002 Maintenance - Vehicles</p>	<p>Spent</p> <p>24,136</p> <p>2,682</p> <p>5,364</p> <p>8,800</p> <p>4,026</p> <p>10,392</p> <p>4,023</p> <p>4,023</p> <p>8,046</p> <p>1,159</p> <p>16,091</p> <p>8,183</p> <p>6,705</p> <p>5,431</p>
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Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
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Reasons for Variation in performance

Total	109,058
Wage Recurrent	0
Non Wage Recurrent	109,058
Arrears	0
AIA	0
Total For Department	127,830
Wage Recurrent	0
Non Wage Recurrent	127,830
Arrears	0
AIA	0

Departments

Department: 14 Bulindi ZARDI

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

	Item	Spent
Four technology dissemination Campaigns conducted in the zone	5 technology dissemination Campaigns conducted in the four districts. 373 farmers (93 in Kagadi local Government, 94 in Bulindi Model, horticulture and apiculture youth trainees, and 190 in Kiryandongo LG) have been exposed to various technologies including, climate smart horticultural production and value addition, climate smart apiculture, livestock production including pasture establishment.	
	224001 Medical Supplies	2,600
	224006 Agricultural Supplies	3,750

Reasons for Variation in performance

Increased enthusiasm in improve planting material and agricultural information across planting seasons.

Total	6,350
Wage Recurrent	0
Non Wage Recurrent	6,350
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
Strategically focused research activities supported by 4 advisory meetings 8 technologies availed to farmers for Improved linkage between Bulindi ZARDI, and the communities. 1 Annual report generated, disseminated and archived Equip the institution ICT	- Research agenda strengthened holding three advisory committee meetings. - Bulindi ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional. - 812 farmers (youth, women and men) have been exposed to improved technologies during 2 farm clinics. - Institute reports (quarterly and annual) developed and submitted to NARO Secretariat.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 223005 Electricity 224001 Medical Supplies 224006 Agricultural Supplies 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	Spent 15,097 9,945 928 13,261 7,380 6,630 6,630 22,891 3,400 3,260 1,326 8,619 9,889 16,576

Reasons for Variation in performance

Total	125,831
Wage Recurrent	0
Non Wage Recurrent	125,831
Arrears	0
AIA	0
Total For Department	132,181
Wage Recurrent	0
Non Wage Recurrent	132,181
Arrears	0
AIA	0

Departments

Department: 15 Kachwekano ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

20 sorghum genotypes generated 6 demonstration sites established in 6 districts in SWHAEZ with at least 3 new potato varieties	5 sorghum genotypes generated 2 demonstration sites established in 6 districts in SWHAEZ with at least one new potato varieties.	Item 211103 Allowances (Inc. Casuals, Temporary) 224001 Medical Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils	Spent 8,238 14,073 7,258 2,994
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Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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More varieties and on farm demonstrations were not possible due to limited resources (funds, vehicles and personnel) to undertake them.

	Total	32,562
	Wage Recurrent	0
	Non Wage Recurrent	32,562
	Arrears	0
	<i>AIA</i>	0

Budget Output: 02 Research extension interface promoted and strengthened

6 Demonstration sites established in 6 districts in SWHAEZ with at least 3 new potato varieites	6 demonstrations on new potato varieties planted, monitored and growth and yield data collected analyzed and presented	Item	Spent
		221001 Advertising and Public Relations	3,512
		224006 Agricultural Supplies	1,342

Reasons for Variation in performance

	Total	4,854
	Wage Recurrent	0
	Non Wage Recurrent	4,854
	Arrears	0
	<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

Enhancing institutional research capacity, safe through routine monitoring (4trips), safe guarding assets, servicing of computers (20times) and infrastructure vehicles(7) machinery (4) maintenance .	Kachwekano ZARDI physical resources enhanced (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	14,704
		221001 Advertising and Public Relations	2,683
		221007 Books, Periodicals & Newspapers	979
		221008 Computer supplies and Information Technology (IT)	4,789
		221009 Welfare and Entertainment	8,549
		221011 Printing, Stationery, Photocopying and Binding	4,025
		221012 Small Office Equipment	1,342
		222001 Telecommunications	1,073
		223005 Electricity	10,061
		223006 Water	3,354
		224004 Cleaning and Sanitation	12,940
		226001 Insurances	671
		227001 Travel inland	6,983
		227004 Fuel, Lubricants and Oils	10,061
		228002 Maintenance - Vehicles	8,049

Reasons for Variation in performance

	Total	90,260
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Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
		Wage Recurrent	0
		Non Wage Recurrent	90,260
		Arrears	0
		AIA	0
		Total For Department	127,676
		Wage Recurrent	0
		Non Wage Recurrent	127,676
		Arrears	0
		AIA	0

Departments

Department: 16 Mukono ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

		Item	Spent
2 agronomic practices of indigenous tomato, onions and Bambara nuts cultivars established	- 1 agronomic practices of indigenous tomato, onions and Bambara nuts cultivars initiated 1 effective weed management options for groundnuts production identified and packaged.	221011 Printing, Stationery, Photocopying and Binding	8,300
1 effective weed management options for groundnuts production identified and packaged for		222001 Telecommunications	2,964
1 bio-pesticides and one fertilizer determined		223004 Guard and Security services	18,972
1 effective weed management	- One on-station tomato experiment using variety MV was established using three (3) organic foliar fertilizers (Bio-Nik, Nugro and Nutriplant), soluble NPK (19:19:19), control. Data collected on plant height, pest and disease incidence, number of fruits per plant, weight of fruits per plant fruits. Nutriplant had the most vigorous plants with an average plant height of 67.27 cm followed by Nugro (63.0 cm), NPK (62.77 cm), Bio-Nik (58.3 cm) and the control (60.35); The average number of fruits per plant was not significantly different for the different fertilizers but Nugro had the heighest (6.63) followed by NPK (6.6), Nutri (6.33), Bio-Nik (6.20) and the control 6.1). Average weight of fruits per plant was not significantly different but Nugro had the heighest weight of fruits per plant (0.93 Kg), follwoed by Nutriplant (0.657 kg), NPK (0.583 kg), Bio-Nik (0.513 kg) and the control 0.48 kg). Late blight was the common disease across the treatments but there were no significant different in the incidence and severity while the leaf miner was the main pest	223005 Electricity	29,643
		223006 Water	3,557
		224006 Agricultural Supplies	14,824
		227001 Travel inland	4,743
		227004 Fuel, Lubricants and Oils	17,786

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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		Total	100,788
		Wage Recurrent	0
		Non Wage Recurrent	100,788
		Arrears	0
		<i>AIA</i>	0

Budget Output: 02 Research extension interface promoted and strengthened

120 key market chain actors identified.	60 key market chain actors identified. 1	Item	Spent
4 potential market opportunities analyzed	potential market opportunities analyzed	211103 Allowances (Inc. Casuals, Temporary)	2,750
1000 stakeholders reached	500 stakeholders reached 2 partnerships	224006 Agricultural Supplies	4,000
2 partnerships established	established 1 potential market		
4 potential market opportunities analyzed	opportunities analyzed 500 stakeholders		
1000 stakeholders	engaged for improved technology		
	promotion		

Reasons for Variation in performance

	Total	6,750
	Wage Recurrent	0
	Non Wage Recurrent	6,750
	Arrears	0
	<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Enhancement and maintained of ICT Infrastructure	Mukono ZARDI physical resources enhanced (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional. A community radio talk show was held at Ntawo, which reach about 20 local farmers.	Item	Spent
2 partnerships established		211103 Allowances (Inc. Casuals, Temporary)	11,857
1000 stakeholders reached and 2 partnerships established		221001 Advertising and Public Relations	5,614
120 key market chain actors identified		221003 Staff Training	1,500
4 potential market opportunities analyzed		221007 Books, Periodicals & Newspapers	2,372
		221008 Computer supplies and Information Technology (IT)	10,330
4 M&E reports briefs s	One potential market opportunities analyzed 1 M&E report brief developed to guide management of research	221009 Welfare and Entertainment	7,114
	Enhancement and maintained of ICT Infrastructure 1 partnership established	221011 Printing, Stationery, Photocopying and Binding	2,372
	1000 stakeholders reached and 2 partnerships established	222002 Postage and Courier	1,779
	120 key market chain actors identified	224004 Cleaning and Sanitation	13,865
		226001 Insurances	830
		228001 Maintenance - Civil	15,375
		228002 Maintenance - Vehicles	15,693
		228003 Maintenance – Machinery, Equipment & Furniture	6,522
		228004 Maintenance – Other	2,964
		273102 Incapacity, death benefits and funeral expenses	1,779

Reasons for Variation in performance

Total	99,963
Wage Recurrent	0
Non Wage Recurrent	99,963
Arrears	0
AIA	0
Total For Department	207,500
Wage Recurrent	0
Non Wage Recurrent	207,500
Arrears	0
AIA	0

Departments

Department: 17 Ngetta ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
1 effective technique for estimating weed seed quantity and type in soil developed, 1 integrated approach for managing weeds in maize under CA systems developed, 1 mango fruitfly IPM strategy developed, 2 acres of at least four Indigenous fruit trees orcha	1) Performance of 3 seed bank estimation methods on station reported. The green house germination estimation method performed best , followed by the cloth bag and lastly flotation method. 2) Two acres of four Indigenous fruit trees (mangos, citrus, shea nut butter) orchards maintained on station. Data collection on-going on mango fruit.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 224001 Medical Supplies 224006 Agricultural Supplies 227001 Travel inland	Spent 10,322 3,440 203 1,142 4,162 15,076 13,542

Reasons for Variation in performance

Work still on-going on mango fruitfly IPM strategy.

Total	47,886
Wage Recurrent	0
Non Wage Recurrent	47,886
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

4 technologies promoted with in the zone	4 improved NARO rice varieties multiplication and demonstration fields were prepared, maintained and promoted on station to different stakeholders.	Item 221001 Advertising and Public Relations 221008 Computer supplies and Information Technology (IT) 224006 Agricultural Supplies	Spent 1,328 3,984 9,902
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Reasons for Variation in performance

On farm demonstrations were not possible due to limited resources (funds, vehicles and personnel) to undertake them

Total	15,213
Wage Recurrent	0
Non Wage Recurrent	15,213
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Institutional research infastructures maintained	Ngetta ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional - two administrative, policy and all mandatory reports prepared and submitted. - Staff wages and security services sourced and paid during the quarter.	Item	Spent
Research undertakings quidded through 4 research committees		211103 Allowances (Inc. Casuals, Temporary)	2,997
		221008 Computer supplies and Information Technology (IT)	6,774
		221011 Printing, Stationery, Photocopying and Binding	3,320
		222001 Telecommunications	664
		223004 Guard and Security services	11,953
		223005 Electricity	4,556
		223006 Water	5,119
		224004 Cleaning and Sanitation	3,320
		227001 Travel inland	8,500
		227004 Fuel, Lubricants and Oils	10,626
		228002 Maintenance - Vehicles	10,625

Reasons for Variation in performance

Total	68,453
Wage Recurrent	0
Non Wage Recurrent	68,453
Arrears	0
AIA	0
Total For Department	131,552
Wage Recurrent	0
Non Wage Recurrent	131,552
Arrears	0
AIA	0

Departments

Department: 18 Nabium ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
1,000 kgs of better performing pasture seed (32 acres of planting material) species (Chloris gayana, Centrocema,	- 250 kgs of better performing pasture seed (8 acres of planting material) species (Chloris gayana, Centrocema, for increased production and productivity of livestock 115 cattles; 30 Sahiwal and 15 friesian cattle crosses and 70 zebu cattle multiplied on-station to increase availability to farmers	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	11,951
		221001 Advertising and Public Relations	433
		221008 Computer supplies and Information Technology (IT)	1,891
		221011 Printing, Stationery, Photocopying and Binding	863
		224001 Medical Supplies	4,611
		224006 Agricultural Supplies	14,938
		227001 Travel inland	9,118
		227004 Fuel, Lubricants and Oils	3,317
		228002 Maintenance - Vehicles	2,554

Reasons for Variation in performance

Under performance due to resource constraints (poor running vehicles, no funds and available personnel)to establish pasture seed fields. Under performance was due to early on-set of drought and poor germinability of Chloris and Cenchrus seeds, only 4 acres grass established (3 acres of Bracharia brizantha and 01 acre of Napier grass)and maintained on-station

Total	49,674
Wage Recurrent	0
Non Wage Recurrent	49,674
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Promotion and popularization of 4 selected crop, natural resources and animal value chain products and bi-products in NEAZ	1) NARO technologies exhibited during the 1st Eastern Agricultural Show 4th -6th March, 2022 at Awoja Riverside Farm Soroti. These included, soil testing kit demonstration,the soil fertility amendment material and packages available, apiary products and bi-products,pastures preservation technologies.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	1,646
		221001 Advertising and Public Relations	398
		221003 Staff Training	265
		221008 Computer supplies and Information Technology (IT)	398
		221011 Printing, Stationery, Photocopying and Binding	398
		224001 Medical Supplies	995
		224006 Agricultural Supplies	1,659
		227001 Travel inland	796
		227004 Fuel, Lubricants and Oils	398
		228002 Maintenance - Vehicles	531
	2) Two training carried out on-station, involving 50 stakeholders from Moroto, Nabilatuk, Nakapiripirit, Abim and Amudat district.		

Reasons for Variation in performance

Total	7,483
Wage Recurrent	0
Non Wage Recurrent	7,483

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
		Arrears	0
		AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Local, regional, national and international cooperation on and access to science, technology, innovation and knowledge sharing enhanced.	-Nabuin ZARDI Physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional Held a mini exhibition when the first son visited Nabuin ZARDI. - Nabuin ZARDI Physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional. - Participated one farm clinic to facilitate access to science, technology, innovation thru knowledge sharing.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	12,101
		221001 Advertising and Public Relations	1,062
		221007 Books, Periodicals & Newspapers	664
		221009 Welfare and Entertainment	1,990
		221011 Printing, Stationery, Photocopying and Binding	2,654
		222002 Postage and Courier	430
		223004 Guard and Security services	4,591
		223005 Electricity	3,001
		224004 Cleaning and Sanitation	2,861
		224005 Uniforms, Beddings and Protective Gear	843
		226001 Insurances	508
		227001 Travel inland	3,980
		227004 Fuel, Lubricants and Oils	15,192
		228001 Maintenance - Civil	5,307
		228002 Maintenance - Vehicles	13,267
		228003 Maintenance – Machinery, Equipment & Furniture	5,307
		273102 Incapacity, death benefits and funeral expenses	1,062

Reasons for Variation in performance

Total	74,816
Wage Recurrent	0
Non Wage Recurrent	74,816
Arrears	0
AIA	0
Total For Department	131,972
Wage Recurrent	0
Non Wage Recurrent	131,972
Arrears	0
AIA	0

Departments

Department: 19 Mbarara ZARDI

Outputs Provided

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
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Budget Output: 01 Generation of agricultural technologies

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Item	Spent
4 Carbohydrate and cellulose digesting bacteria isolated	Multiplication and characterization of 4 carbohydrate and cellulose digesting bacteria completed.	211103 Allowances (Inc. Casuals, Temporary)	12,266
1 detailed research protocol developed.		223004 Guard and Security services	670
1 research protocol developed and pretested in 5 farmer groups of 2 districts	One research protocol developed and pretested in 5 farmer groups of 2 districts	224001 Medical Supplies	10,054
1 appropriate formula of carbohydrate & cellulose digesting bacteria packaged &		224006 Agricultural Supplies	13,607
		227001 Travel inland	9,049
		227004 Fuel, Lubricants and Oils	5,027

Reasons for Variation in performance

Work on-going.

Total	50,672
Wage Recurrent	0
Non Wage Recurrent	50,672
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Item	Spent
Sixteen research (16) technologies delivered to uptake pathways for increased production and productivity.	1 tool to guide farmers in sustainable soil fertility management and conservation developed for enhanced banana productivity to increase household incomes among farmers in the 6 of the 16 districts of South Western Agro Ecological Zone.	222003 Information and communications technology (ICT)	1,806
	10 dairy cattle(5 heifers and 5 young bulls) of Improved genetics availed to farmers.	224006 Agricultural Supplies	4,215
	One cattle feed supplement (500 kgs) delivered to farmers.		

Reasons for Variation in performance

Total	6,022
Wage Recurrent	0
Non Wage Recurrent	6,022
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
Maintenance of institute IT infrastructures 15 institute research facilities maintained Assorted institute machinery maintained 4 rounds in the year	- Mbarara ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional 320 Experimental animals maintained.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture	Spent 6,044 2,205 3,352 4,022 5,362 1,341 8,044 5,362 2,681 5,362 811 8,044 6,705 2,011 7,882 2,011

Reasons for Variation in performance

Total	71,236
Wage Recurrent	0
Non Wage Recurrent	71,236
Arrears	0
AIA	0
Total For Department	127,930
Wage Recurrent	0
Non Wage Recurrent	127,930
Arrears	0
AIA	0

Departments

Department: 20 Buginyaya ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
2 effective foundation seed systems for Orange Fleshed Sweet Potato validated & promoted for utilization of Vit A rich food in Busoga sub region	1) 0.4 ha of Narospot 8 (orange fleshed sweet potato) variety being maintained at Ikulwe satellite station.	Item	Spent
10 t of elite breeders seed for niche products of elite arabica coffee & brewing cassava varieties availed for	2) 4.5 tonnes of coffee harvested, 1 tonne reserved for seed.	211103 Allowances (Inc. Casuals, Temporary)	8,133
		221011 Printing, Stationery, Photocopying and Binding	573
		224001 Medical Supplies	4,142
		224006 Agricultural Supplies	24,359
	Elite breeder seed of 9 candidate maize QPM varieties Q150114, Q444638, Q160138, Q160114, Q444614, Q150138, Q160121, Q150121 and Q160152 selected and due for planting in farmer participatory demos, and for QPM validation test.	227001 Travel inland	13,175
		227004 Fuel, Lubricants and Oils	6,113
		228002 Maintenance - Vehicles	880
	3) Four fields of cassava varieties fields were prepared and maintained on station.		

Reasons for Variation in performance

Total	57,373
Wage Recurrent	0
Non Wage Recurrent	57,373
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

4 fish farmers supported in improved fish farming	One fish farmers supported in improved fish farming	Item	Spent
6 niche products and accompanying productivity improvement identified	One niche products and accompanying productivity improvement identified	211103 Allowances (Inc. Casuals, Temporary)	10,069
Economic value from use of new coffee berry disease disease management options in Mt. Elgon	Economic value from use of new coffee berry disease disease management options in Mt. Elgon.	221011 Printing, Stationery, Photocopying and Binding	697
		224001 Medical Supplies	4,423
		224006 Agricultural Supplies	28,078
	Five fish farmers and three extension workers trained on fish farm management to Mbale fish fry centre	227001 Travel inland	16,039
		227004 Fuel, Lubricants and Oils	7,965

Reasons for Variation in performance

Total	67,269
Wage Recurrent	0
Non Wage Recurrent	67,269
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
4agriculture technologies developed & disseminated,4agriculture technologies developed & disseminated for uptake,1 three sets of furniture and fittings acquired, Assorted ICT Infrastructure maintained and services provided for technology generation and	2 hybrid stakeholder engagement held (World food day and Seeds of Gold) 35 kgs and 25 kgs of Chloris gayana seed harvested for Nabugimbi Khyehutana women's group and Wanak farmers group respectively. Buginyanya ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional	Item 211103 Allowances (Inc. Casuals, Temporary) 221007 Books, Periodicals & Newspapers 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Telecommunications 222003 Information and communications technology (ICT) 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture 228004 Maintenance – Other 273102 Incapacity,death benefits and funeral expenses	Spent 12,456 1,780 1,187 4,152 2,373 4,745 4,745 5,932 3,559 3,559 2,966 1,187 5,935 8,733 2,966 8,898 2,966 2,966 1,187

Reasons for Variation in performance

Total	82,287
Wage Recurrent	0
Non Wage Recurrent	82,287
Arrears	0
AIA	0
Total For Department	206,929
Wage Recurrent	0
Non Wage Recurrent	206,929
Arrears	0
AIA	0

Departments

Department: 21 Rwebitaba ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
1000 open pollinated seeds collected from selected	A total of 3000 open pollinated tea seedlings collected and established in the screen house at Rwebitaba TRC.	Item	Spent
5 elite parents from the existing germplasm conserved identified		211103 Allowances (Inc. Casuals, Temporary)	34,569
40 tea clones characterized for biochemical attributes		221011 Printing, Stationery, Photocopying and Binding	12,173
10,000 clonal plantlets from at least 4 selected clones multiplied		224001 Medical Supplies	10,902
		224006 Agricultural Supplies	108,696
		227001 Travel inland	29,862
		228002 Maintenance - Vehicles	10,538
		228003 Maintenance – Machinery, Equipment & Furniture	5,500

Reasons for Variation in performance

Total	212,239
Wage Recurrent	0
Non Wage Recurrent	212,239
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

3 acres of early generation potato seed	6 acres of technological innovations prepared and maintained on station.	Item	Spent
7 tons and 1.5 tons of potato and bean foundation seed respectively	These included:	211103 Allowances (Inc. Casuals, Temporary)	2,340
harvested and availed to community seed systems/ local seed	i) 3 acres of early generation potato seed.	221011 Printing, Stationery, Photocopying and Binding	535
	ii) 3 acres of potato foundation seed and 1 acre of bean foundation prepared and maintained on station.	224006 Agricultural Supplies	22,162
		227001 Travel inland	1,671
	and or re-established and 200 farmers learn from them		

Reasons for Variation in performance

Work still on-going

Total	26,708
Wage Recurrent	0
Non Wage Recurrent	26,708
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Two Advisory committee, two PARI director's forum meetings and and 12 institute committee meetings held to guide research activities The institute machinery and equipment maintained The institute research facilities maintained	Two Advisory committee, one PARI director's forum meetings and and 9 institute committee meetings held to guide research activities The institute machinery and equipment maintained The institute research facilities maintained and fully functional.	Item 211103 Allowances (Inc. Casuals, Temporary) 213002 Incapacity, death benefits and funeral expenses 221007 Books, Periodicals & Newspapers 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 224005 Uniforms, Beddings and Protective Gear 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles	Spent 12,841 1,348 1,605 3,209 4,011 2,006 2,941 3,209 7,855 5,883 2,006 354 11,783 7,353 2,006 2,104

Reasons for Variation in performance

Total	70,509
Wage Recurrent	0
Non Wage Recurrent	70,509
Arrears	0
AIA	0
Total For Department	309,455
Wage Recurrent	0
Non Wage Recurrent	309,455
Arrears	0
AIA	0

Departments

Department: 26 NARO Internal Audit

Outputs Provided

Budget Output: 03 Internal Audit

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
1 end of year annual Audit performance workshop conducted	4 internal audit staff train in enterprise risk management with IIA	Item	Spent
Eight Audit reports developed: One Off budget project audit report	6 Internal Audit staff together with the DG and a member of the A & R Committee attend the annual IIA conference to build on the CPDs	221003 Staff Training	2,800
One audit report on assets utilization and safety, compliance with PPDA Act report	One audit report produced on the performance of NTR on generation of NTR to support research.	227001 Travel inland	69,148
One ICT , Human Resource and CGS value	Hands on training, coaching of audit staff, review of reports and working papers at MbaZARDI and KaZARDI Special audits supported at ARDC-Kajjansi and at the reallocation to Maruzi Consultative risk management meetings at PARIs to indentify risks, mitigation controls and update of the risk register held one performance/ core research audit report produced one audit report on the Technology transfer and promotion with emphasis on ICT enhancement and incubation services produced A report on public relations function produced with emphasis on evaluating the Communication Development Officers' function Risk Register updated		

Reasons for Variation in performance

Total	71,948
Wage Recurrent	0
Non Wage Recurrent	71,948
Arrears	0
AIA	0
Total For Department	71,948
Wage Recurrent	0
Non Wage Recurrent	71,948
Arrears	0
AIA	0

Departments

Department: 27 National Coffee Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
4 high value coffee & cocoa products prototypes developed	1) 4 acres of mother garden maintained - 1906 pieces of Kirundu and 108 pieces of panels prepared from fallen trees.	Item	Spent
15 putative red blister resistant, 5 putative BCTB tolerant and 5 putative drought tolerant accessions collected cloned for phenotyping	2) Cocoa pulp wine and chocolate prototypes developed at NaCORI. These prototypes require further profiling for their constituent contents and certification / quality mark.	211103 Allowances (Inc. Casuals, Temporary)	4,164
20,000 TC-derived coffee plantlets produced & delivered.		221001 Advertising and Public Relations	1,893
Ide		221007 Books, Periodicals & Newspapers	3,470
		221011 Printing, Stationery, Photocopying and Binding	202
		224006 Agricultural Supplies	8,366
		225001 Consultancy Services- Short term	24,769
		227001 Travel inland	22,662
		227004 Fuel, Lubricants and Oils	9,245
	3) 457 cultures initiated		
	• 1,216 embryo cultures with on solid media		
	• 101 liquid cultures in flasks		
	• 195 RITAs with germinating embryos		
	• 5,818 in humid poly-boxes		
	3,604 coffee plantlets undergoing hardening & 15,558 coffee plants ready for planting		

Reasons for Variation in performance

Work on-going

Total	74,768
Wage Recurrent	0
Non Wage Recurrent	74,768
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
Research and extension interface promoted and strengthened through maintenance of ITC infrastructure Promotion of better coffee varieties	1) Coffee technologies demonstrated at 3 farm clinics. - 10 kg of seed and 480 seedling of arabica coffee availed to farmers. 2) 90 cocoa farmers and extension workers trained on cocoa Good Agronomi Practices (GAPs) through NaCORI outreach programs and farmer/extension worker visits to NaCORI-Kituza Cocoa pulp wine and chocolate prototypes developed at NaCORI. These prototypes require further profiling for their constituent contents and certification/quality mark 10.5 acres of cocoa fields at NaCORI-Kituza continuously maintained by pruning, weed control and application of phytosanitary measures. 100 cocoa genotypes characterised for resistance to pests and diseases, pod and bean characteristics. Major cocoa pests on-station include psyllids, mirids and pod borers. Pod rot is the major cocoa disease identified.	Item 221008 Computer supplies and Information Technology (IT)	Spent 3,028

Reasons for Variation in performance

Total	3,028
Wage Recurrent	0
Non Wage Recurrent	3,028
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Research capacity strengthened through 4 (four) Advisory committee meetings, routine maintenance of research infrastructure, machinery and equipment, securing research activity sites and motivating staff notify more CWD pathogen specific primers from the	NACORI human resources and physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional - two administrative, policy and all mandatory reports prepared and submitted. - Staff wages and security services sourced and paid during the quarter.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 227004 Fuel, Lubricants and Oils	Spent 14,822 3,155 60,882
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Reasons for Variation in performance

Total	78,859
Wage Recurrent	0
Non Wage Recurrent	78,859
Arrears	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
		AIA	0
		Total For Department	156,655
		Wage Recurrent	0
		Non Wage Recurrent	156,655
		Arrears	0
		AIA	0

Development Projects

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

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

		Item	Spent
60 elite calves produced to constitute the elite research and embryo production herd at NaLIRRI	1) 75 low cost embryos produced.	211103 Allowances (Inc. Casuals, Temporary)	110,000
2000 tons of silage and hay produced	2) 70 elite calves for Jersey and Friesian crosses produced	224001 Medical Supplies	185,000
		224006 Agricultural Supplies	295,000
200 tons of grain soya, maize and sunflower produced	3) tons of Livestock feed, seed, silage and hay and input for feed were produced	227001 Travel inland	55,000
MT tons of f	as follows:	227004 Fuel, Lubricants and Oils	90,000
	a) 400 tons of silage produced	228002 Maintenance - Vehicles	55,000
	b) 5. 4750 tons of hay from 20 acres produced;	228003 Maintenance – Machinery, Equipment & Furniture	200,000
	c) 20 tons of soya, 30 tons of maize produced.		
	d) 1.5 MT of forage seed produced		

Reasons for Variation in performance

Total	990,000
GoU Development	990,000
External Financing	0
Arrears	0
AIA	0

Capital Purchases

Budget Output: 72 Government Buildings and Administrative Infrastructure

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
1 office block with a store renovated at Nakyesasa. 10 km of road network to ease access to research facilities developed at Maruzi. One administration block constructed at Maruzi. 1 hay barn constructed at Nakyesasa 500 meter tarmack road constructed	<p>1) Hay barn at Maruzi at 100%. Defects liability period expired. Contractor has addressed all the identified contractual snags.</p> <p>2) Construction of Calf/Heifer Barn - Project Progress: 30%. Target progress- 45%. Chain link fence construction on going, hardcore filling done, casting the slab done, curing the slab on going,</p> <p>3) Construction of Maruzi Access Road-8KM Project Progress:85% Target progress-90% Mobilization. Shaping done, Murrum filling done, Compaction of the murrum on going, mitre drains provisions done,</p> <p>4) Construction/ Extension of power line & Reticulation to the Maruzi Farm-Apac Contract signed, contractor is mobilizing and securing clearances from UEDCL..</p> <p>5) Construction of Residential Houses at Maruzi - Contract to be signed.</p> <p>6) Water extension project to Maruzi - Procurement process ongoing.</p> <p>7) Extra works at Maruzi-Assorted works - Contract signed, contractor is mobilizing .</p>	<p>Item</p> <p>312101 Non-Residential Buildings</p> <p>312102 Residential Buildings</p> <p>312104 Other Structures</p>	<p>Spent</p> <p>1,445,762</p> <p>600,859</p> <p>270,000</p>

Reasons for Variation in performance

1) Construction of a Main Admin Block at Maruzi - Procurement process concluded but not signed due to limited funds.

2) Construction of a Grain Store and Hay Barn - Procurement process concluded but not signed due to limited funds.

Total	2,316,621
GoU Development	2,316,621
External Financing	0
Arrears	0
AIA	0
Total For Project	3,306,621
GoU Development	3,306,621
External Financing	0
Arrears	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
		AIA	0

Development Projects

Project: 1619 Retooling of National Agricultural Research Organization

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

50 technologies generated, 20 innovations developed to support improved production and productivity for accelerated agro Industrialization.	Thru CGS support was given development of 50 technologies, 20 innovations to support improved production and productivity for accelerated agro Industrialization.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	1,218,976
		221001 Advertising and Public Relations	117,298
		221003 Staff Training	60,081
		221006 Commissions and related charges	449
		221008 Computer supplies and Information Technology (IT)	36,306
		221011 Printing, Stationery, Photocopying and Binding	72,664
		222001 Telecommunications	1,815
		222003 Information and communications technology (ICT)	157,110
		223005 Electricity	25,840
		223006 Water	2,678
		224001 Medical Supplies	553,453
		224005 Uniforms, Beddings and Protective Gear	1,929
		224006 Agricultural Supplies	2,228,219
		225001 Consultancy Services- Short term	254,138
		227001 Travel inland	1,633,083
		227004 Fuel, Lubricants and Oils	175,440
		228002 Maintenance - Vehicles	12,082
		228003 Maintenance – Machinery, Equipment & Furniture	13,631

Reasons for Variation in performance

Narratives about the 50 technologies and 20 innovations have been reported under the Key vote performance highlights for the reporting period.

Total	6,565,192
GoU Development	6,565,192
External Financing	0
Arrears	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

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
Eight technology promotion interfaces conducted	1) Progress on technology promotion interfaces:	Item	Spent
Eight automated technology promotion tools developed	a) Implementation of the NARO seed Fair by NACRRI and UBIC. Through partnerships, 8 seed companies participated and 456 farmers accessed quality seed.	211103 Allowances (Inc. Casuals, Temporary)	223,185
109 technological innovations delivered to uptake pathways	b) NARO institutes to conducted exhibitions during Parish Development model where 2650 participants were reached. A total of 21 technologies along 6 commodities were showcased.	221001 Advertising and Public Relations	367,473
20 partnerships developed for technology multiplication and promotion	c) Participated in the Eastern Agricultural Show. 1010 participants were reached and partnership linkages initiated. 41 technologies along 7 commodities were showcased.	221003 Staff Training	24,850
	d) Participated in the in Harvest Money Expo at Kololo where 7687 Farmers and stakeholders were exposed to NARO technologies. 32 technologies along 8 commodities were showcased.	221007 Books, Periodicals & Newspapers	5,979
	e) Two technology promotion clinics conducted.	221008 Computer supplies and Information Technology (IT)	30,265
		221011 Printing, Stationery, Photocopying and Binding	45,052
	2) Progress on Automated technology promotion tools developed. One for technology incubation. And another for managing IP.	222001 Telecommunications	797
		222003 Information and communications technology (ICT)	223,034
		224001 Medical Supplies	27,757
		224006 Agricultural Supplies	220,790
		227001 Travel inland	545,961
		227004 Fuel, Lubricants and Oils	15,998
		228001 Maintenance - Civil	168,000
		228002 Maintenance - Vehicles	5,768
		228003 Maintenance – Machinery, Equipment & Furniture	1,664
	3) Progress on Technological innovations delivered to uptake pathways. 72 technological innovations were delivered to uptake pathways.		
	4) Progress on Partnerships developed for technology multiplication and promotion – Six partnership engagements were conducted with stakeholders. Two with seed companies , Two on licensing, One on commercialization, One on intellectual property, three on NARO tech know-how to farming communities.		

Reasons for Variation in performance

Two automated technology promotion have prioritized due to resource availability. Six will be prioritized next financial year.

Total	1,906,573
GoU Development	1,906,573
External Financing	0
Arrears	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
16 research institutes research infrastructure maintained	1) Two technology promotion clinics conducted.	Item	Spent
Four institute laboratories supported for accreditation		211103 Allowances (Inc. Casuals, Temporary)	49,605
16 laboratory equipment maintained/serviced	2) Two automated technology promotion tools developed.	221001 Advertising and Public Relations	1,594
NARO wide training plan 2021_22 developed	3) 20 seed company engaged in partnerships for technology multiplication and promotion.	221003 Staff Training	372,055
49 staff recruited to strengthen research Capacity		221004 Recruitment Expenses	84,635
		221006 Commissions and related charges	1,081
		221007 Books, Periodicals & Newspapers	2,800
	4) NARO wide training plan 2021_22 developed.	221008 Computer supplies and Information Technology (IT)	449,357
		221009 Welfare and Entertainment	48,801
		221011 Printing, Stationery, Photocopying and Binding	122,937
		221012 Small Office Equipment	4,518
		221016 IFMS Recurrent costs	69,950
		221017 Subscriptions	42,521
		222003 Information and communications technology (ICT)	54,751
		223005 Electricity	3,284
		223006 Water	15,948
		224004 Cleaning and Sanitation	956
		224006 Agricultural Supplies	95,000
		225001 Consultancy Services- Short term	65,629
		226002 Licenses	98,536
		227001 Travel inland	615,821
		227004 Fuel, Lubricants and Oils	135,792
		228001 Maintenance - Civil	106,189
		228002 Maintenance - Vehicles	54,951
		228003 Maintenance – Machinery, Equipment & Furniture	14,659
		228004 Maintenance – Other	5,234

Reasons for Variation in performance

Total	2,516,604
GoU Development	2,516,604
External Financing	0
Arrears	0
AIA	0

Outputs Funded

Budget Output: 51 Payments to International Organisations (CGIAR, ASARECA, WARDA)

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Quarterly Compliance to 6 international organizations (CGIAR, ASERECA, FARA, CABI WADRA and BeCA) and autonomous institutions strengthened.	Quarterly compliance to 6 international organizations (CGIAR, ASERECA, FARA, CABI WADRA and BeCA) and autonomous institutions strengthened.	Item 262201 Contributions to International Organisations (Capital)	Spent 892,993
Reasons for Variation in performance			
		Total	892,993
		GoU Development	892,993
		External Financing	0
		Arrears	0
		AIA	0

Capital Purchases

Budget Output: 72 Government Buildings and Administrative Infrastructure

7 agricultural research facilities established across four public research Institutes of NaCCORI, NARL, NaLIRRI, Rwebitaba, for efficient delivery of research services to accelerate	Civil works at 100% completion	Item	Spent
Agro Industrialization, 2 irrigation facilities NaCRRI & Kigumba	1) Construction of a Hass screen House at NAFORRI.	281504 Monitoring, Supervision & Appraisal of Capital work	792,499
	2) Construction of road network at NALIRRI -	312101 Non-Residential Buildings	10,050,060
		312102 Residential Buildings	405,133
		312104 Other Structures	81,631
	3) Construction of diagnostic laboratory at Kajansi - Mbarara seed sorting facility.		
	4) Construction of Road Network at Nalirri.		
	5) Rehabilitation & Remodelling of NARO Incubation centre at MuZARDI.		
	6) Others civil works NACORI multipurpose laboratory ongoing at 99% .		
	- Multi purpose vaccine facility construction at Nakyesasa at 65%.		
	- Construction of start up structures (paddock fencing, cattle dip, water reticulation, fencing, toilet hay barn & containers), at Maruzi. - Project work progress at 82%. -		
	Namalele Administration block construction at Namalere work progress at 50% complete. -		
	Aflasafe plant construction at Nakyesasa Project progress at 80% complete.		

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
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- 1) Construction of a Grain Store and Hay Barn - Procurement process concluded but contract not signed due to limited funds.
- 2) Establishing an irrigation facility NACRR was not done due to lack of funds.
- 3) Some civil works were a spil-over from previous years.
- 4) Slow progress is due contractors not mobilizing construction materials in time.
- 5) Upgrading the Irrigation Water Systems at still in procurement process. It is at awaiting for submission of Designs/Bills of Quantities.

Total	11,329,323
GoU Development	11,329,323
External Financing	0
Arrears	0
AIA	0

Budget Output: 76 Purchase of Office and ICT Equipment, including Software

		Item	Spent
Five (5) Agricultural intelligence tools acquired	1) Two digital research platforms developed. i.e Incubation system and IP system.	312213 ICT Equipment	83,500
Agricultural Research Big data center developed	2) Three NARO knowledge products developed for technology dissemination		
Ten (10) digital research platforms developed	One value chain, digital online plat form developed and uploaded on the NARO website.		
Six (6) NARO knowledge products developed for technology dissemination	3) One draft concept note on big data developed.		
Five (5) value chain, digital online	4) One value chain, digital online plat form on fish developed and maintained.		

Reasons for Variation in performance

Work still on going for
1)Five (5) Agricultural intelligence tools.

Work differed for:

- 1) Six digital research platforms .
- 2) Three NARO knowledge products developed for technology dissemination.
- 3) Five (5) value chain, digital online.

Total	83,500
GoU Development	83,500
External Financing	0
Arrears	0
AIA	0

Budget Output: 77 Purchase of Specialised Machinery & Equipment

Vote:142 National Agricultural Research Organisation

QUARTER 3: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	US\$ Thousand
Laboratory equipment for 5 research facilities acquired; Rwebitaba tea research, invitro and embryo transfer, Incubation facility at Mukono, fisheries research at Kajansi & research workshop at NASARRI	Laboratory equipment for one fisheries research and one for forestry research	Item	Spent
		312202 Machinery and Equipment	1,756,935
		312214 Laboratory Equipments	1,100,000
Reasons for Variation in performance			
		Total	2,856,935
		GoU Development	2,856,935
		External Financing	0
		Arrears	0
		AIA	0
Budget Output: 78 Purchase of Office and Residential Furniture and Fittings			
Four agriculture research facilities at NaLIRRI, Rwebitaba, NaCORI and NaFIRI furnished	Continued to furnish two agriculture research facilities at NaLIRRI and Rwebitaba tea research facility furnished.	Item	Spent
		312203 Furniture & Fixtures	81,505
Reasons for Variation in performance			
		Total	81,505
		GoU Development	81,505
		External Financing	0
		Arrears	0
		AIA	0
		Total For Project	26,232,625
		GoU Development	26,232,625
		External Financing	0
		Arrears	0
		AIA	0
		GRAND TOTAL	72,067,768
		Wage Recurrent	25,674,922
		Non Wage Recurrent	16,853,599
		GoU Development	29,539,247
		External Financing	0
		Arrears	297,926
		AIA	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
Sub-SubProgramme: 51 Agricultural Research			
<i>Departments</i>			
Department: 01 Headquarters			
<i>Outputs Provided</i>			
Budget Output: 01 Generation of agricultural technologies			
one physical and budget performance monitoring reports generated to inform management decisions.	- Report on Impact studies being finalized.	Item	Spent
	- Performance monitoring reports generated to inform management decisions	211103 Allowances (Inc. Casuals, Temporary)	7,831
		221006 Commissions and related charges	13,980
		227001 Travel inland	42,500
Reasons for Variation in performance			
Work still on-going			
			Total 64,311
			Wage Recurrent 0
			Non Wage Recurrent 64,311
			AIA 0
Budget Output: 02 Research extension interface promoted and strengthened			
One web-based technology promotion System developed	- One web-based technology promotion System developed.	Item	Spent
Two identified technologies protected,		221007 Books, Periodicals & Newspapers	3,843
Three Intellectual Property management committee (IPMC) engagements coordinated	- 3 IPMC meetings held(IPMC interface with MAAIF.	221011 Printing, Stationery, Photocopying and Binding	50,000
Three IP awareness policy coordinated, 8 Technology licensing agreements signed	- Preparatory meeting for monitoring of seed companies, Meeting with breeders with key resolutions and decisions included; drafting of solicitor general letter for guidance on NARO variety licensing, communicate to PARIs about breeder seed bulking requirements and the streamlined procedure of access.	221012 Small Office Equipment	230
Two Business plans and proposals developed and 3 digital based technology promotions conducted		222001 Telecommunications	16,170
		222002 Postage and Courier	300
		223005 Electricity	12,926
		223006 Water	10,103
		227001 Travel inland	15,720
	- One licence agreement between NARO and Advanta signed, MOU between NARO and Katebe farms processed; 1 expression of interest from Uganda prisons seed limited for partnership in foundation seed production received and being processed.		
	- Records management information system to support of administration activities developed.		
Reasons for Variation in performance			
Work still on going for developing the technology promotion System, technologies protected, IPMC engagements & IP awareness policy coordinated, and Technology licensing agreements			
			Total 109,292
			Wage Recurrent 0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		Non Wage Recurrent	109,292
		AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
10 NARO staff supported for MScs and PhDs, 1000 acres of NARO secured through titling, Quarterly Compliance to 6 international organizations (CGIAR, ASERECA, FARA, CABI WADRA and BeCA) strengthened, Coordinated Research oversight in the 16 PARIs strengthened to support development of research for products to stimulate industries, Security enhanced in the 16 NARO PARIs, 1 routine facilities maintenance conducted in the 16 Public research institutes	<p>- Coordinated Research oversight in the 16 PARIs strengthened to support development of research for products to stimulate industries, Security enhanced in the 16 NARO PARIs,</p> <p>- 1 routine mission conducted on research facilities in the 16 Public research institutes.</p> <p>- Human resource of 910 staff managed and maintained by . paying staff salaries for the months of January-March 2022.</p> <p>- And social security contribution for 901 staff for the months of January - March 2022 remitted to NSSF.</p> <p>- Annual subscription paid for 30 staff who belong to professional bodies.</p> <p>76 NARO staff competencies enhanced through long term and short term training. (i.e. 01 PHD, 01 MSC, 01 in logistics and transport (CILT), 03 NARO staffs on effective office management; 14 staffs on transformational human resource management; officers; 20 on Procurement Management; 03 NARO Accountants for professional development fees; 17 Internal Auditors in professional development; 11 NARO technicians in experimental SOPs and data management</p> <p>- Professional development fees for over 40 NARO staff(Federation of Uganda Employers)</p> <p>- Professional development fees for 06 NARO Accountants in ACCA. Professional development fees for TWO NARO Administrative professionals. - professional development in Information Technology. 01 student.</p> <p>500 acres of NARO titled, strengthened compliance to 6 international organizations,</p> <p>Physical resources (office buildings, vehicles, compounds) and utilities secured, functional and managed effectively and efficiently.</p>	<p>Item</p> <p>211102 Contract Staff Salaries</p> <p>212101 Social Security Contributions</p> <p>213001 Medical expenses (To employees)</p> <p>213002 Incapacity, death benefits and funeral expenses</p> <p>213004 Gratuity Expenses</p> <p>221001 Advertising and Public Relations</p> <p>221006 Commissions and related charges</p> <p>221009 Welfare and Entertainment</p> <p>221011 Printing, Stationery, Photocopying and Binding</p> <p>221016 IFMS Recurrent costs</p> <p>222001 Telecommunications</p> <p>222003 Information and communications technology (ICT)</p> <p>223004 Guard and Security services</p> <p>224004 Cleaning and Sanitation</p> <p>227001 Travel inland</p> <p>227004 Fuel, Lubricants and Oils</p> <p>228001 Maintenance - Civil</p> <p>228002 Maintenance - Vehicles</p> <p>228003 Maintenance – Machinery, Equipment & Furniture</p> <p>228004 Maintenance – Other</p> <p>273102 Incapacity,death benefits and funeral expenses</p>	<p>Spent</p> <p>8,564,839</p> <p>855,831</p> <p>369,372</p> <p>378,000</p> <p>2,139,577</p> <p>668</p> <p>9,428</p> <p>72,947</p> <p>1,027</p> <p>160</p> <p>34,934</p> <p>3,600</p> <p>4,290</p> <p>10,524</p> <p>36,834</p> <p>132,403</p> <p>2,871</p> <p>134,868</p> <p>12,496</p> <p>6,195</p> <p>16,300</p>

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
		Total	12,787,165
		Wage Recurrent	8,564,839
		Non Wage Recurrent	4,222,326
		AIA	0

Arrears

Total For Department	12,960,768
Wage Recurrent	8,564,839
Non Wage Recurrent	4,395,929
AIA	0

Departments

Department: 07 National Crops Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Five technologies for food and nutrition security developed and submitted to the varieties release committee. The varieties have capacity to fight hidden hunger, improve production and productivity and also increase competitiveness agricultural products on market.

- Submitted to VRC, 3 bush and 3 climber beans varieties for DUS test.
- 4 earlier submitted candidate varieties re-submitted.
- 2 new rice varieties submitted to VRC.
- 4 earlier submitted rice varieties released.

Item	Spent
211103 Allowances (Inc. Casuals, Temporary)	19,373

Reasons for Variation in performance

Total	19,373
Wage Recurrent	0
Non Wage Recurrent	19,373
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Four technologies delivered to uptake path ways for increased production and productivity and accelerated agro industrialization, food security and employment creation.

- 2 tons of quality breeder maize seed produced (of six varieties) .
- 8 tons of foundation bean seed harvested ready for delivery of 5 varieties).
- 1 ton of vegetative planting materials ready for farmers (two cassava, three sweet potato, three citrus seedlings)

Item	Spent
221001 Advertising and Public Relations	1,480

Reasons for Variation in performance

Total	1,480
Wage Recurrent	0
Non Wage Recurrent	1,480
AIA	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
Budget Output: 04 Agricultural research capacity strengthened			
1) One Bio-sciences laboratories maintained.	Physical resources (offices, laboratories, field machinery, office equipment)	Item	Spent
2) Four on-station field research facilities maintained.	maintained and fully functional. These included: the Bio-sciences laboratories, tissue culture lab, screen houses. Admin offices.	211103 Allowances (Inc. Casuals, Temporary)	1,480
3. Two Crop production facilities maintained to create enabling environment for Agriculture research.		221008 Computer supplies and Information Technology (IT)	3,368
		221009 Welfare and Entertainment	3,960
		221011 Printing, Stationery, Photocopying and Binding	3,700
		222001 Telecommunications	2,960
		223004 Guard and Security services	4,440
		223005 Electricity	14,800
		224004 Cleaning and Sanitation	2,960
		226001 Insurances	474
		227001 Travel inland	5,365
		227004 Fuel, Lubricants and Oils	11,100
		228002 Maintenance - Vehicles	11,840
		228003 Maintenance – Machinery, Equipment & Furniture	2,220

Reasons for Variation in performance

Total	68,667
Wage Recurrent	0
Non Wage Recurrent	68,667
AIA	0
Total For Department	89,520
Wage Recurrent	0
Non Wage Recurrent	89,520
AIA	0

Departments

Department: 08 National Fisheries Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies			
4,125 brood stock of fisheries resources acquired for sustainable seed production and Breeding that is; Two thousand five hundred (2500) Tilapia, Five thousand (1,000) catfish, One thousand (250) mirror carp and Five hundred (500) Barbus.	60 barbus broodstock undergoing conditioning onstation; 62670 quality sex reversed tilapia fry produced and availed to farmers; 23310 mixed sex tilapia, and 3450 african catfish produced.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	4,687
		224006 Agricultural Supplies	3,903
		227001 Travel inland	1,558
		227004 Fuel, Lubricants and Oils	2,524

Reasons for Variation in performance

Only four out of 10 cages were available for stocking. Others were still under rehabilitation.

Total	12,671
Wage Recurrent	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
		Non Wage Recurrent	12,671
		AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Strengthened capacity and creating an enabling environment for fish breeding and handling for ponds and 3 office blocks cleaned.

Strengthened Stakeholders awareness in aquaculture.

Reasons for Variation in performance

Item	Spent
	Total
	0
	Wage Recurrent
	0
	Non Wage Recurrent
	0
	AIA
	0

Budget Output: 04 Agricultural research capacity strengthened

1 fish laboratory and one aquarium maintained & operationalized, 1 cage research facility maintained and operationalized.

Fisheries Premises and assets protected/guarded for improved safety

3 office blocks cleaned. Salaries for 25 contract staff paid ;Staff welfare items procured; fuel for administrative activities procured; 03 Institute vehicles and equipment maintained; information leaflets/brochures/ booklets produced; Aquaculture research technologies demonstrated in at least 2 exhibitions.

Item	Spent
211103 Allowances (Inc. Casuals, Temporary)	13,761
221001 Advertising and Public Relations	4,476
221007 Books, Periodicals & Newspapers	2,491
221008 Computer supplies and Information Technology (IT)	673
221009 Welfare and Entertainment	3,395
221011 Printing, Stationery, Photocopying and Binding	4,222
222001 Telecommunications	2,116
222003 Information and communications technology (ICT)	6,563
223004 Guard and Security services	5,914
223005 Electricity	8,564
223006 Water	4,088
224004 Cleaning and Sanitation	4,040
226001 Insurances	544
227001 Travel inland	12,073
227004 Fuel, Lubricants and Oils	8,598
228001 Maintenance - Civil	3,367
228002 Maintenance - Vehicles	11,896
228003 Maintenance – Machinery, Equipment & Furniture	5,320

Reasons for Variation in performance

Total	102,097
Wage Recurrent	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		Non Wage Recurrent	102,097
		AIA	0
		Total For Department	114,768
		Wage Recurrent	0
		Non Wage Recurrent	114,768
		AIA	0

Departments

Department: 09 National Forestry Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Data on the prototypes of energy saving stove that can efficiently utilise charcoal dust as fuel analyzed
On-station tree-crop interaction trial/demo site established at Kifu

Item	Spent
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Reasons for Variation in performance

Total	0
Wage Recurrent	0
Non Wage Recurrent	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

150 farmers exposed to salient tree-crop interactions different farming systems
50 Stakeholder equipped with best agronomic practices for production of quality avocado and annona germplasm

Training content developed and outreach strategy drafted.
150 Farmers for training identified. But not trained.

Item	Spent
221001 Advertising and Public Relations	1,084
221007 Books, Periodicals & Newspapers	867
221008 Computer supplies and Information Technology (IT)	1,807

Reasons for Variation in performance

Funds not available for training farmer.

Total	3,758
Wage Recurrent	0
Non Wage Recurrent	3,758
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
Institute capacity to support agricultural research and innovations enhanced through routine maintenance of vital research support components (infrastructure, equipment, machinery, vehicles, computers & ICT); re-tooling and guidance of staff	- Provision of Security/safety for Institute premises,assets & trials. - Refreshments to 69 staff members & 30 visitors. Institute capacity to support agricultural research and innovations enhanced through: - Routine maintenance of Office blocks, 1 conference Hall, 2 field vehicles 1 staff van,1 generator,1 water pump,5 computers,10,000 square meters of compound.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	6,394
		221003 Staff Training	1,446
		221009 Welfare and Entertainment	2,168
		221011 Printing, Stationery, Photocopying and Binding	3,613
		222001 Telecommunications	723
		222002 Postage and Courier	289
		222003 Information and communications technology (ICT)	6,812
		223004 Guard and Security services	7,226
		223005 Electricity	15,507
		224004 Cleaning and Sanitation	5,949
		224005 Uniforms, Beddings and Protective Gear	723
		227001 Travel inland	5,780
		227004 Fuel, Lubricants and Oils	12,074
		228001 Maintenance - Civil	3,252
		228002 Maintenance - Vehicles	6,411
		228003 Maintenance – Machinery, Equipment & Furniture	2,529

Reasons for Variation in performance

Total	80,892
Wage Recurrent	0
Non Wage Recurrent	80,892
AIA	0
Total For Department	84,650
Wage Recurrent	0
Non Wage Recurrent	84,650
AIA	0

Departments

Department: 10 National Livestock Resources Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
One anti-tick candidate vaccine molecule validated in various agro-ecological zones of Uganda.	1) Responses to Scientific audit queries on the On-station vaccine clinical trial were reviewed and results were satisfactory. The results were presented to Project PI and PL by UNCST.	Item	Spent
One broad-spectrum chimeric anti-tick vaccine formulated & evaluated		211103 Allowances (Inc. Casuals, Temporary)	71,892
Two FMD candidate vaccines evaluated. One African swine fever candidate vaccine evaluated on station	2) Two meetings for supervision of the NARO Vaccine Production Facility were successfully held by the NARO engineer, Project contractor and PIs of ASF, FMD and Anti-tick vaccine project.	221003 Staff Training	23,885
		221017 Subscriptions	8,998
		222003 Information and communications technology (ICT)	32,487
		223004 Guard and Security services	6,664
		223005 Electricity	60,284
		224001 Medical Supplies	190,611
	3) NBC granted a conditional biosafety approval for a confined field trial (CFT).	224004 Cleaning and Sanitation	15,542
		224005 Uniforms, Beddings and Protective Gear	12,820
	4) Protocols for CFT were submitted to NDA for review.	224006 Agricultural Supplies	121,875
		225001 Consultancy Services- Short term	20,825
	5) Continued with optimization of conditions for amplification of p67 T.parva antigens	227001 Travel inland	38,318
		227004 Fuel, Lubricants and Oils	49,980
		228001 Maintenance - Civil	33,320
		228002 Maintenance - Vehicles	58,310
		228003 Maintenance – Machinery, Equipment & Furniture	65,391

Reasons for Variation in performance

NARO engaged the national Authorities in vaccine development i.e NBC, UNCST e.t.c. NARO sought the necessary approvals before further progress was conducted.

Work is still on going.

Total	811,200
Wage Recurrent	0
Non Wage Recurrent	811,200
<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
3 livestock laboratories and one forage conservation facility maintained. Herbarium and two on-station field research facilities maintained. 10 research and production facilities maintained. Livestock laboratories and one forage conservation facility maintained. Herbarium and two on-station field research facilities maintained. 10 research and production facilities maintained.	1) Three livestock laboratories and one forage conservation facility maintained. 2) Two on-station field research facilities maintained. 3) Four livestock production facilities maintained. 4) Six research handling facilities maintained. 5) Physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 221012 Small Office Equipment 222001 Telecommunications 223005 Electricity 224004 Cleaning and Sanitation 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture 273102 Incapacity, death benefits and funeral expenses	Spent 26,784 2,715 362 3,620 5,429 5,791 1,564 1,448 2,172 3,258 464 2,974 7,239 2,009 6,515 2,425 7,239

Reasons for Variation in performance

Total	82,005
Wage Recurrent	0
Non Wage Recurrent	82,005
AIA	0
Total For Department	893,205
Wage Recurrent	0
Non Wage Recurrent	893,205
AIA	0

Departments

Department: 11 National Semi arid Resources Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
5 sesame lines evaluated, data for characterization of 10 accessions of cowpea and 20 of pigeon pea analyzed, suitable soil & water conservation strategy development evaluation initiated, Two farmer preferred cotton lines with industrial attributes identification information analyzed.	Land 3 acres for sesame MLTs prepared, trial materials assembled for Serere, Arua, Lira, Kitgum and Mayuge. Trials were monitored and 2 sets of field data was collected.	Item 211103 Allowances (Inc. Casuals, Temporary) 224006 Agricultural Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils	Spent 18,038 19,783 42,567 19,217
Reasons for Variation in performance			
Work on-going			
		Total	99,604
		Wage Recurrent	0
		Non Wage Recurrent	99,604
		AIA	0

Budget Output: 04 Agricultural research capacity strengthened

14 acres of compound mowed and 3 office blocks maintained to create enabling environment for research One dissemination workshops conducted, 3 scientific committee meetings conducted to guide research	14 acres of compound mowed and 3 office blocks maintained to create enabling environment for research One dissemination workshops conducted, 3 scientific committee meetings conducted to guide research	Item 211103 Allowances (Inc. Casuals, Temporary) 213002 Incapacity, death benefits and funeral expenses 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	Spent 9,906 2,901 2,901 2,176 4,802 4,352 5,077 1,450 4,352 7,252 1,451 4,352 440 5,104 3,852 5,802
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Reasons for Variation in performance

Need for further efficacy testing to determine the best rate of application.

Only 3 meetings conducted vs the envisage 9 because of lack of funds to facilitated the committees.

Total	66,165
Wage Recurrent	0
Non Wage Recurrent	66,165
AIA	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		Total For Department	165,768
		Wage Recurrent	0
		Non Wage Recurrent	165,768
		AIA	0

Departments

Department: 12 National Laboratories Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

3 Value added product from maize, beans, vegetables for commercialization developed. Propagation systems developed for two plant genetic resources, 500 genotypes from banana Hybrid seed generated.	3 Value added product from maize, beans, vegetables for commercialization developed were further refined. Propagation systems developed for two plant genetic resources, 500 genotypes from banana Hybrid seed generated. Work still on-going.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	43,950
		221009 Welfare and Entertainment	543
		221011 Printing, Stationery, Photocopying and Binding	2,378
		222001 Telecommunications	418
		223005 Electricity	6,015
		224004 Cleaning and Sanitation	626
		224006 Agricultural Supplies	86,166
		227001 Travel inland	40,203
		227004 Fuel, Lubricants and Oils	3,875
		228002 Maintenance - Vehicles	501
		228003 Maintenance – Machinery, Equipment & Furniture	1,252

Reasons for Variation in performance

- Work still on-going.
- Available resources (funds for materials and manpower) limited the scope of intended work.

	Total	185,923
	Wage Recurrent	0
	Non Wage Recurrent	185,923
	AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

One batch of Agriculture Research Information Education Communication material developed and disseminated.	An assortment of Agriculture Research Information Education Communication material developed and disseminated during 2 exhibitions..	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	4,900
		221011 Printing, Stationery, Photocopying and Binding	5,680
		224006 Agricultural Supplies	84,100
		227001 Travel inland	15,500

Reasons for Variation in performance

	Total	110,180
	Wage Recurrent	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
		Non Wage Recurrent	110,180
		AIA	0

Budget Output: 04 Agricultural research capacity strengthened

One research management committees conducted to guide research Procedure for application of procedures and policies Institution machinery and equipment maintained.	One research management committees conducted to guide research Procedure for application of procedures and policies Institution machinery and equipment maintained.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	33,892
		221001 Advertising and Public Relations	7,695
		221003 Staff Training	5,500
		221007 Books, Periodicals & Newspapers	2,003
		221008 Computer supplies and Information Technology (IT)	9,065
		221009 Welfare and Entertainment	7,796
		221011 Printing, Stationery, Photocopying and Binding	7,510
		221012 Small Office Equipment	2,086
		222001 Telecommunications	1,440
		222002 Postage and Courier	211
		223004 Guard and Security services	16,714
		223005 Electricity	18,757
		227001 Travel inland	19,732
		227004 Fuel, Lubricants and Oils	25,122
		228001 Maintenance - Civil	3,721
		228002 Maintenance - Vehicles	16,996
		228003 Maintenance – Machinery, Equipment & Furniture	4,763
		228004 Maintenance – Other	2,712

Reasons for Variation in performance

Total	185,710
Wage Recurrent	0
Non Wage Recurrent	185,710
AIA	0
Total For Department	481,813
Wage Recurrent	0
Non Wage Recurrent	481,813
AIA	0

Departments

Department: 13 Abi ZARDI

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
One technology generated for increased production and productivity One innovation developed for increased production and productivity of priority commodities to support agro-industrialisation.	On station demonstrations were generated and maintained (cassava, sorghum) and some maintained (mangoes) The two farm Clinics held at ABI ZARDI that has so far attracted several stakeholders and eight different key commodities have been showcased their entire value chain. Lessons learnt will be scaled out to the PDM and other beneficiaries.	Item 221001 Advertising and Public Relations 221008 Computer supplies and Information Technology (IT) 221011 Printing, Stationery, Photocopying and Binding	Spent 3,955 2,637 2,637

Reasons for Variation in performance

Total	9,228
Wage Recurrent	0
Non Wage Recurrent	9,228
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

One advisory committee and PARI directors forum, institute committee meetings conducted to guide and redirect research.	One advisory committee and PARI directors forum, institute committee meetings conducted to guide and redirect research.	Item 211103 Allowances (Inc. Casuals, Temporary) 221008 Computer supplies and Information Technology (IT) 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 224006 Agricultural Supplies 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil	Spent 11,864 1,318 2,637 7,200 1,975 5,108 1,978 1,978 3,955 570 7,909 3,818 3,296
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Reasons for Variation in performance

Total	53,603
Wage Recurrent	0
Non Wage Recurrent	53,603
AIA	0
Total For Department	62,830
Wage Recurrent	0
Non Wage Recurrent	62,830

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
			AIA 0

Departments

Department: 14 Bulindi ZARDI

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

One technology dissemination Campaign conducted in the zone to improve production, productivity and agro based industries.	One technology dissemination Campaign conducted in the zone to improve production, productivity and agro based industries.	Item	Spent
		224001 Medical Supplies	1,400
		224006 Agricultural Supplies	2,250

Reasons for Variation in performance

Increased enthusiasm in improve planting material and agricultural information across planting seasons.

Total	3,650
Wage Recurrent	0
Non Wage Recurrent	3,650
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Strategically focused research activities supported by 1 advisory meeting 2 technologies availed to farmers for Improved linkage between Bulindi ZARDI, and the communities. 1 Annual report generated, disseminated and archived Equip the institution ICT facilities of the institute	- Research agenda strengthened holding one advisory committee - Bulindi ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	7,903
		221001 Advertising and Public Relations	5,055
		221007 Books, Periodicals & Newspapers	472
		221008 Computer supplies and Information Technology (IT)	6,740
		221009 Welfare and Entertainment	2,620
		221011 Printing, Stationery, Photocopying and Binding	3,370
		221012 Small Office Equipment	3,370
		223005 Electricity	13,110
		224001 Medical Supplies	600
		224006 Agricultural Supplies	1,786
		226001 Insurances	674
		227001 Travel inland	4,381
		227004 Fuel, Lubricants and Oils	5,026
		228002 Maintenance - Vehicles	8,425

Reasons for Variation in performance

Total	63,531
Wage Recurrent	0
Non Wage Recurrent	63,531
AIA	0
Total For Department	67,181
Wage Recurrent	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		Non Wage Recurrent	67,181
		AIA	0

Departments

Department: 15 Kachwekano ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

		Item	Spent
5 sorghum genotypes generated	5 sorghum genotypes generated 2		
2 demonstration sites established in 6	demonstration sites established in 6	211103 Allowances (Inc. Casuals, Temporary)	5,062
districts in SWHAEZ with at least 1 new	districts in SWHAEZ with at least one	224001 Medical Supplies	6,144
potato varieties	new potato varieties.	227001 Travel inland	3,563
		227004 Fuel, Lubricants and Oils	1,470

Reasons for Variation in performance

More varieties and on farm demonstrations were not possible due to limited resources (funds, vehicles and personnel) to undertake them.

	Total	16,238
	Wage Recurrent	0
	Non Wage Recurrent	16,238
	AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

		Item	Spent
2 Demonstration site established in 1	6 demonstrations on new potato varieties		
districts in SWHAEZ with at least 3 new	planted, monitored and growth and yield	221001 Advertising and Public Relations	2,488
potato varieties introduced	data collected analyzed and presented	224006 Agricultural Supplies	659

Reasons for Variation in performance

	Total	3,147
	Wage Recurrent	0
	Non Wage Recurrent	3,147
	AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
Enhancing institutional research capacity, safe through routine monitoring (4trips), safe guarding assets, servicing of computers (20times) and infrastructure vehicles(7) machinery (4) maintenance .	Kachwekano ZARDI physical resources enhanced (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	8,236
		221001 Advertising and Public Relations	1,317
		221007 Books, Periodicals & Newspapers	481
		221008 Computer supplies and Information Technology (IT)	2,351
		221009 Welfare and Entertainment	3,451
		221011 Printing, Stationery, Photocopying and Binding	1,976
		221012 Small Office Equipment	659
		222001 Telecommunications	527
		223005 Electricity	4,939
		223006 Water	1,647
		224004 Cleaning and Sanitation	5,061
		226001 Insurances	330
		227001 Travel inland	3,428
		227004 Fuel, Lubricants and Oils	4,939
		228002 Maintenance - Vehicles	3,952

Reasons for Variation in performance

Total	43,291
Wage Recurrent	0
Non Wage Recurrent	43,291
AIA	0
Total For Department	62,676
Wage Recurrent	0
Non Wage Recurrent	62,676
AIA	0

Departments

Department: 16 Mukono ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
1 agronomic practices of indigenous tomato, onions and Bambara nuts cultivars initiated	One agronomic practices of indigenous tomato, onions and Bambara nuts cultivars initiated	Item	Spent
1 effective weed management options for groundnuts production identified and packaged for	One effective weed management options for groundnuts production identified and packaged.	221011 Printing, Stationery, Photocopying and Binding	5,700
		222001 Telecommunications	2,036
		223004 Guard and Security services	13,029
		223005 Electricity	20,357
		223006 Water	2,443
		224006 Agricultural Supplies	10,177
		227001 Travel inland	3,257
		227004 Fuel, Lubricants and Oils	12,215

Reasons for Variation in performance

Total	69,213
Wage Recurrent	0
Non Wage Recurrent	69,213
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

30 key market chain actors identified.	30 more key market chain actors identified. 200 stakeholders reached 2 partnerships established 1 potential market opportunities analyzed 250 more stakeholders engaged for improved technology promotion	Item	Spent
1 potential market opportunities analyzed		211103 Allowances (Inc. Casuals, Temporary)	1,250
250 stakeholders reached		224006 Agricultural Supplies	2,000
2 partnerships established			
1 potential market opportunities analyzed			
250stakeholders engaged for improved technology promotion			

Reasons for Variation in performance

Total	3,250
Wage Recurrent	0
Non Wage Recurrent	3,250
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
One potential market opportunities analyzed 1 M&E report brief developed to guide management of research Enhancement and maintained of ICT Infrastructure 1 partnership established 1000 stakeholders reached and 2 partnerships established 120 key market chain actors identified	One potential market opportunities analyzed 1 M&E report brief developed to guide management of research Enhancement and maintained of ICT Infrastructure 1 partnership established 1000 stakeholders reached and 2 partnerships established 120 key market chain actors identified	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221003 Staff Training 221007 Books, Periodicals & Newspapers 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222002 Postage and Courier 224004 Cleaning and Sanitation 226001 Insurances 228001 Maintenance - Civil 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture 228004 Maintenance – Other 273102 Incapacity, death benefits and funeral expenses	Spent 9,143 4,386 1,500 1,629 6,468 4,886 1,629 1,222 10,004 570 10,559 10,308 4,479 2,036 1,222

Reasons for Variation in performance

Total	70,038
Wage Recurrent	0
Non Wage Recurrent	70,038
AIA	0
Total For Department	142,500
Wage Recurrent	0
Non Wage Recurrent	142,500
AIA	0

Departments

Department: 17 Ngetta ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
The process for development of 1 effective technique for estimating weed seed quantity and type in soil initiated	2 acres of at least four Indigenous fruit trees orchards maintained	Item	Spent
1 integrated approach for managing weeds in maize under CA systems initiated		211103 Allowances (Inc. Casuals, Temporary)	4,771
		221001 Advertising and Public Relations	1,740
		221011 Printing, Stationery, Photocopying and Binding	103
2 acres of at least four Indigenous fruit trees orchards established		222001 Telecommunications	578
		224001 Medical Supplies	2,106
		224006 Agricultural Supplies	7,627
		227001 Travel inland	6,851

Reasons for Variation in performance

Work still on-going on mango fruitfly IPM strategy.

	Total	23,775
	Wage Recurrent	0
	Non Wage Recurrent	23,775
	<i>AIA</i>	0

Budget Output: 02 Research extension interface promoted and strengthened

One technology for food, nutrition and industry promoted with in the zone	4 different rice varieties demonstration and multiplication fields maintained.	Item	Spent
		221001 Advertising and Public Relations	672
		221008 Computer supplies and Information Technology (IT)	2,016
		224006 Agricultural Supplies	5,010

Reasons for Variation in performance

On farm demonstrations were not possible due to limited resources (funds, vehicles and personnel) to undertake them

	Total	7,697
	Wage Recurrent	0
	Non Wage Recurrent	7,697
	<i>AIA</i>	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
Institutional research infrastructures maintained to aid research for products and industry. Research undertakings quidded and redirected through one research committee meeting.	Ngetta ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional - two administrative, policy and all mandatory reports prepared and submitted. - Staff wages and security services sourced and paid during the quarter.	Item 211103 Allowances (Inc. Casuals, Temporary) 221008 Computer supplies and Information Technology (IT) 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	Spent 1,967 3,427 1,680 336 6,047 2,305 2,590 1,680 4,300 5,374 5,375

Reasons for Variation in performance

Total	35,080
Wage Recurrent	0
Non Wage Recurrent	35,080
AIA	0
Total For Department	66,552
Wage Recurrent	0
Non Wage Recurrent	66,552
AIA	0

Departments

Department: 18 Nabium ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

250 kgs of better performing pasture seed (8 acres of planting material) species (Chloris gayana, Centrocema, for increased production and productivity of livestock	- 3 acres of Bracharia brizantha maintained established and on-station.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221008 Computer supplies and Information Technology (IT) 221011 Printing, Stationery, Photocopying and Binding 224001 Medical Supplies 224006 Agricultural Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	Spent 5,499 220 960 438 2,340 8,812 5,638 1,683 1,296
115 cattles; 30 Sahiwal and 15 friesian cattle crosses and 70 zebu cattle multiplied on-station to increase availability to farmers	115 cattle; 30 Sahiwal and 15 friesian cattle crosses and 70 zebu cattle multiplied on-station to increase availability to farmers		

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
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Under performance due to resource constraints (poor running vehicles, no funds and available personnel)to establish pasture seed fields. Under performance was due to early on-set of drought and poor germinability of Chloris and Cenchurus seeds, only 4 acres grass established (3 acres of Bracharia brizantha and 01 acre of Napier grass)and maintained on-station

	Total	26,884
	Wage Recurrent	0
	Non Wage Recurrent	26,884
	AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Promotion and popularization of 1 selected crop, natural resources and animal value chain products and bi-products in NEAZ	NARO technologies exhibited during the Ist Eastern Agricultural Show 4th -6th March, 2022 at Awoja Riverside Farm Soroti. These included, soil testing kit demonstration,the soil fertility amendment material and packages available, apiary products and bi-products,pastures preservation technologies	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	455
		221001 Advertising and Public Relations	202
		221003 Staff Training	135
		221008 Computer supplies and Information Technology (IT)	202
		221011 Printing, Stationery, Photocopying and Binding	202
		224001 Medical Supplies	505
		224006 Agricultural Supplies	842
		227001 Travel inland	404
		227004 Fuel, Lubricants and Oils	202
		228002 Maintenance - Vehicles	270

Reasons for Variation in performance

	Total	3,418
	Wage Recurrent	0
	Non Wage Recurrent	3,418
	AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
Local, regional, national and international cooperation on and access to science, technology, innovation and knowledge sharing enhanced.	- Nabuin ZARDI Physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional. - Participated one farm clinic to facilitate access to science, technology, innovation thru knowledge sharing.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	3,899
		221001 Advertising and Public Relations	539
		221007 Books, Periodicals & Newspapers	337
		221009 Welfare and Entertainment	1,010
		221011 Printing, Stationery, Photocopying and Binding	1,347
		222002 Postage and Courier	218
		223004 Guard and Security services	2,330
		223005 Electricity	1,523
		224004 Cleaning and Sanitation	1,452
		224005 Uniforms, Beddings and Protective Gear	428
		226001 Insurances	258
		227001 Travel inland	2,020
		227004 Fuel, Lubricants and Oils	8,656
		228001 Maintenance - Civil	2,693
		228002 Maintenance - Vehicles	6,733
		228003 Maintenance – Machinery, Equipment & Furniture	2,693
		273102 Incapacity, death benefits and funeral expenses	539

Reasons for Variation in performance

Total	36,671
Wage Recurrent	0
Non Wage Recurrent	36,671
AIA	0
Total For Department	66,972
Wage Recurrent	0
Non Wage Recurrent	66,972
AIA	0

Departments

Department: 19 Mbarara ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
1 Carbohydrate and cellulose digesting bacteria isolated 1 detailed research protocol developed. 1 research protocol for pretesting in 5 farmer groups of 2 districts initiated The development of 1 appropriate formula of carbohydrate & cellulose digesting bacteria packaging initiated.	1 research protocol developed and pretested in 5 farmer groups of 2 districts	Item 211103 Allowances (Inc. Casuals, Temporary) 223004 Guard and Security services 224001 Medical Supplies 224006 Agricultural Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils	Spent 6,034 330 4,946 6,694 4,452 2,473

Reasons for Variation in performance

Work on-going.

Total	24,928
Wage Recurrent	0
Non Wage Recurrent	24,928
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Four research technologies delivered to uptake pathways for increased production and productivity.	1 tool to guide farmers in sustainable soil fertility management and conservation developed for enhanced banana productivity to increase household incomes among farmers in the 6 of the 16 districts of South Western Agro Ecological Zone	Item 222003 Information and communications technology (ICT) 224006 Agricultural Supplies	Spent 1,194 2,785
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Reasons for Variation in performance

Total	3,979
Wage Recurrent	0
Non Wage Recurrent	3,979
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
Maintenance of institute IT infrastructures 15 institute research facilities maintained Assorted institute machinery maintained 1 round in the quarter	- Mbarara ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional 320 Experimental animals maintained.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221008 Computer supplies and Information Technology (IT) 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture	Spent 1,957 1,085 1,649 1,979 2,638 660 3,957 2,638 1,319 2,638 399 3,957 3,295 989 3,877 989

Reasons for Variation in performance

Total	34,023
Wage Recurrent	0
Non Wage Recurrent	34,023
AIA	0
Total For Department	62,930
Wage Recurrent	0
Non Wage Recurrent	62,930
AIA	0

Departments

Department: 20 Buginyaya ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
2 effective foundation seed systems for Orange Fleshed Sweet Potato validated & promoted for utilization of Vit A rich food in Busoga sub region 2 of elite breeders seed for niche products of elite arabica coffee & brewing cassava varieties availed	0.4 ha of Narospot 8 variety being maintained at Ikulwe satellite station. - 4.5 tonnes of coffee harvested, 1 tonne reserved for seed. Seed of 9 candidate maize QPM varieties Q150114, Q444638, Q160138, Q160114, Q444614, Q150138, Q160121, Q150121 and Q160152 selected and due for planting in farmer participatory demos, and for QPM validation test	Item 211103 Allowances (Inc. Casuals, Temporary) 221011 Printing, Stationery, Photocopying and Binding 224001 Medical Supplies 224006 Agricultural Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	Spent 4,902 393 2,841 17,385 9,037 4,058 604

Reasons for Variation in performance

Total	39,218
Wage Recurrent	0
Non Wage Recurrent	39,218
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

One fish farmers supported in improved fish farming One niche products and accompanying productivity improvement identified Economic value from use of new coffee berry disease management options in Mt. Elgon	Five fish farmers and three extension workers trained on fish farm management to Mbale fish fry centre.	Item 211103 Allowances (Inc. Casuals, Temporary) 221011 Printing, Stationery, Photocopying and Binding 224001 Medical Supplies 224006 Agricultural Supplies 227001 Travel inland 227004 Fuel, Lubricants and Oils	Spent 5,799 478 3,034 20,366 11,001 5,463
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Reasons for Variation in performance

Total	46,139
Wage Recurrent	0
Non Wage Recurrent	46,139
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
1 agriculture technologies developed & disseminated, 1 agriculture technologies developed & disseminated for uptake	Buginyanya ZARDI physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional - two administrative, policy and all mandatory reports prepared and submitted. - Staff wages and security services sourced and paid during the quarter.	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	8,544
		221007 Books, Periodicals & Newspapers	1,221
		221009 Welfare and Entertainment	814
		221011 Printing, Stationery, Photocopying and Binding	2,848
		221012 Small Office Equipment	1,628
		222001 Telecommunications	3,255
		222003 Information and communications technology (ICT)	3,255
		223004 Guard and Security services	4,069
		223005 Electricity	2,441
		223006 Water	2,441
		224004 Cleaning and Sanitation	2,035
		226001 Insurances	814
		227001 Travel inland	4,066
		227004 Fuel, Lubricants and Oils	6,125
		228001 Maintenance - Civil	2,034
		228002 Maintenance - Vehicles	6,103
		228003 Maintenance – Machinery, Equipment & Furniture	2,035
		228004 Maintenance – Other	2,035
		273102 Incapacity, death benefits and funeral expenses	814

Reasons for Variation in performance

Total	56,572
Wage Recurrent	0
Non Wage Recurrent	56,572
AIA	0
Total For Department	141,929
Wage Recurrent	0
Non Wage Recurrent	141,929
AIA	0

Departments

Department: 21 Rwebitaba ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
250 open pollinated seeds collected from selected 1 elite parents from the existing germplasm conserved identified 10 tea clones characterized for biochemical attributes	250 open pollinated seeds collected from selected parental materials in the existing germplasm field and germinated.	Item 211103 Allowances (Inc. Casuals, Temporary) 221011 Printing, Stationery, Photocopying and Binding 224001 Medical Supplies 224006 Agricultural Supplies 227001 Travel inland 228002 Maintenance - Vehicles 228003 Maintenance – Machinery, Equipment & Furniture	Spent 21,631 7,927 7,099 71,305 18,439 6,862 2,500

Reasons for Variation in performance

Total	135,762
Wage Recurrent	0
Non Wage Recurrent	135,762
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

1 acres of early generation potato seed 2 tons and 1.5 tons of potato and bean foundation seed respectively harvested and availed to community seed systems/ local seed	6 plots for technological innovations maintained and or re-established and 200 farmers learn from them	Item 211103 Allowances (Inc. Casuals, Temporary) 221011 Printing, Stationery, Photocopying and Binding 224006 Agricultural Supplies 227001 Travel inland	Spent 1,161 265 12,201 829
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Reasons for Variation in performance

Work still on-going

Total	14,456
Wage Recurrent	0
Non Wage Recurrent	14,456
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
One PARI director's forum meetings and and 3 institute committee meetings held to guide research activities The institute machinery and equipment maintained The institute research facilities maintained	One Advisory committee, one PARI director's forum meetings and and 3 institute committee meetings held to guide research activities The institute machinery and equipment maintained The institute research facilities maintained	Item 211103 Allowances (Inc. Casuals, Temporary) 213002 Incapacity, death benefits and funeral expenses 221007 Books, Periodicals & Newspapers 221009 Welfare and Entertainment 221011 Printing, Stationery, Photocopying and Binding 222001 Telecommunications 223004 Guard and Security services 223005 Electricity 223006 Water 224004 Cleaning and Sanitation 224005 Uniforms, Beddings and Protective Gear 226001 Insurances 227001 Travel inland 227004 Fuel, Lubricants and Oils 228001 Maintenance - Civil 228002 Maintenance - Vehicles	Spent 5,160 669 796 1,592 1,989 995 1,459 1,592 4,145 2,918 995 176 6,218 3,647 995 897

Reasons for Variation in performance

Total	34,238
Wage Recurrent	0
Non Wage Recurrent	34,238
AIA	0
Total For Department	184,455
Wage Recurrent	0
Non Wage Recurrent	184,455
AIA	0

Departments

Department: 26 NARO Internal Audit

Outputs Provided

Budget Output: 03 Internal Audit

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
One semi annual Audit report produced. Two Audit reports developed: One Off budget project audit report One audit report on assets utilization and safety, compliance with PPDA Act report	4 internal audit staff train in enterprise risk management with IIA 6 Internal Audit staff together with the DG and a member of the A & R Committee attend the annual IIA conference to build on the CPDs One audit report produced on the performance of NTR on generation of NTR to support research. Hands on training, coaching of audit staff, review of reports and working papers at MbaZARDI and KaZARDI Special audits supported at ARDC-Kajjansi and at the reallocation to Maruzi. Consultative risk management meetings at PARIs to identify risks, mitigation controls and update of the risk register held one performance/ core research audit report produced. one audit report on the Technology transfer and promotion with emphasis on ICT enhancement and incubation services produced. A report on public relations produced.Risk Register updated.	Item 221003 Staff Training 227001 Travel inland	Spent 2,800 69,148

Reasons for Variation in performance

Total	71,948
Wage Recurrent	0
Non Wage Recurrent	71,948
<i>AIA</i>	0
Total For Department	71,948
Wage Recurrent	0
Non Wage Recurrent	71,948
<i>AIA</i>	0

Departments

Department: 27 National Coffee Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
One high value coffee & cocoa products prototypes developed and 1 putative drought tolerant accessions collected cloned for phenotyping 5,000 TC-derived coffee plantlets produced & delivered. Ide	Cocoa wine made from cocoa pulp, commercial sales of the wine are ongoing at a small scale at the institute. Chocolate prototypes including chocolate bars made, analysis and defining of the product profiles is planned.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 221007 Books, Periodicals & Newspapers 221011 Printing, Stationery, Photocopying and Binding 224006 Agricultural Supplies 225001 Consultancy Services- Short term 227001 Travel inland 227004 Fuel, Lubricants and Oils	Spent 2,437 1,108 2,030 118 4,895 14,141 13,259 6,156
Reasons for Variation in performance			
Work on-going			
		Total	44,141
		Wage Recurrent	0
		Non Wage Recurrent	44,141
		AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Research and extension interface promoted and strengthened through maintenance of ITC infrastructure Promotion of better coffee varieties	4 farmer groups trained in cocoa PHH and 2 in coffee GAPs and PHH Met with Movit Products Ltd on possibility of commercializing coffee byproducts. MoU and licensing agreement for facial scrub underway • Met with Jesa Ltd on prospects of commercializing coffee-infused yoghurt. Product is being refined with commercially available yoghurt stabilisers. 6 MSc students and 2 PhD students	Item 221008 Computer supplies and Information Technology (IT)	Spent 1,772
Reasons for Variation in performance			
		Total	1,772
		Wage Recurrent	0
		Non Wage Recurrent	1,772
		AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Research capacity strengthened through One 1 (01) advisory committee meetings, routine maintenance of research infrastructure, machinery and equipment, securing research activity sites and motivating staff notify more CWD pathogen specific primers	NACORI human resources and physical resources (offices, laboratories, field machinery, office equipment) secured, maintained and fully functional - two administrative, policy and all mandatory reports prepared and submitted. - Staff wages and security services sourced and paid during the quarter.	Item 211103 Allowances (Inc. Casuals, Temporary) 221001 Advertising and Public Relations 227004 Fuel, Lubricants and Oils	Spent 7,178 1,846 36,718
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Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		Total	45,742
		Wage Recurrent	0
		Non Wage Recurrent	45,742
		AIA	0
		Total For Department	91,655
		Wage Recurrent	0
		Non Wage Recurrent	91,655
		AIA	0

Development Projects

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

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Five hundred (500) tons of silage and hay produced to support livestock dry season farming for improved production and productivity	1) 75 low cost embryos produced.	Item	Spent
50 tons of grain soya, maize and sunflower produced	2) 70 elite calves for Jersey and Friesian crosses produced	211103 Allowances (Inc. Casuals, Temporary)	20,000
MT tons	3) tons of Livestock feed, silage and hay and input for feed were produced as follows:	224001 Medical Supplies	35,000
	a) 400 tons of silage produced	224006 Agricultural Supplies	35,000
	b) 5. 4750 tons of hay from 20 acres produced;	227001 Travel inland	10,000
	c) 20 tons of soya, 30 tons of maize produced.	227004 Fuel, Lubricants and Oils	20,000
	d) 1.5 MT of forage seed produced	228002 Maintenance - Vehicles	10,000

Reasons for Variation in performance

Total	130,000
GoU Development	130,000
External Financing	0
AIA	0

Capital Purchases

Budget Output: 72 Government Buildings and Administrative Infrastructure

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
One office block with a store renovation initiated at Nakyesasa. 5km of road network to ease access to research facilities developed at Maruzi. One all inclusive administration block construction supported. One hay barn construction initiated at Nakyesasa 500 meter tarmack initiated for increased access to the facilities supported.	1) Hay barn at Maruzi at 100%. Defects liability period expired. Contractor has addressed all the identified contractual snags. 2) Construction of Calf/Heifer Barn - Project Progress: 30%. Target progress- 45%. Chain link fence construction on going, hardcore filling done, casting the slab done, curing the slab on going, 3) Construction of Maruzi Access Road-8KM Project Progress:85% Target progress-90% Mobilization. Shaping done, Murrum filling done, Compaction of the murrum on going, mitre drains provisions done, 4) Construction/ Extension of power line & Reticulation to the Maruzi Farm-Apac Contract signed, contractor is mobilizing and securing clearances from UEDCL.. 5) Construction of Residential Houses at Maruzi - Contract to be signed. 8) Water extension project to Maruzi - Procurement process ongoing. 9) Extra works at Maruzi-Assorted works - Contract signed, contractor is mobilizing .	Item 312101 Non-Residential Buildings 312102 Residential Buildings 312104 Other Structures	Spent 695,762 375,109 135,000

Reasons for Variation in performance

- 1) Construction of a Main Admin Block at Maruzi - Procurement process concluded but not signed due to limited funds.
- 2) Construction of a Grain Store and Hay Barn - Procurement process concluded but not signed due to limited funds.

Total	1,205,871
GoU Development	1,205,871
External Financing	0
AIA	0
Total For Project	1,335,871
GoU Development	1,335,871
External Financing	0
AIA	0

Development Projects

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
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Project: 1619 Retooling of National Agricultural Research Organization

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Support to development of 50 technologies, 20 innovations to support improved production and productivity for accelerated agro Industrialization.	Thru CGS support was given development of 10 technologies, 5 innovations	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	340,073
		221001 Advertising and Public Relations	15,779
		221003 Staff Training	10,318
		221006 Commissions and related charges	172
		221008 Computer supplies and Information Technology (IT)	14,465
		221011 Printing, Stationery, Photocopying and Binding	24,578
		222001 Telecommunications	615
		222003 Information and communications technology (ICT)	50,263
		223005 Electricity	9,273
		223006 Water	891
		224001 Medical Supplies	203,457
		224005 Uniforms, Beddings and Protective Gear	750
		224006 Agricultural Supplies	982,114
		225001 Consultancy Services- Short term	118,123
		227001 Travel inland	708,747
		227004 Fuel, Lubricants and Oils	65,043
		228002 Maintenance - Vehicles	7,040
		228003 Maintenance – Machinery, Equipment & Furniture	5,328

Reasons for Variation in performance

Narratives about the 50 technologies and 20 innovations have been reported under the Key vote performance highlights for the reporting period.

Total	2,557,028
GoU Development	2,557,028
External Financing	0
AIA	0

Budget Output: 02 Research extension interface promoted and strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
Two technology promotion interfaces conducted	1) Two technology promotion clinics conducted.	Item	Spent
Two automated technology promotion tools developed		211103 Allowances (Inc. Casuals, Temporary)	52,863
25 technological innovations delivered to uptake pathways	2) Two automated technology promotion tools developed.	221001 Advertising and Public Relations	157,298
5 partnerships developed for technology multiplication and promotion	3) 20 seed company engaged in partnerships for technology multiplication and promotion.	221003 Staff Training	8,482
		221007 Books, Periodicals & Newspapers	2,379
		221008 Computer supplies and Information Technology (IT)	12,410
		221011 Printing, Stationery, Photocopying and Binding	17,913
		222001 Telecommunications	317
		222003 Information and communications technology (ICT)	94,072
		224001 Medical Supplies	10,653
		224006 Agricultural Supplies	42,002
		227001 Travel inland	210,493
		227004 Fuel, Lubricants and Oils	7,762
		228002 Maintenance - Vehicles	2,214
		228003 Maintenance – Machinery, Equipment & Furniture	662

Reasons for Variation in performance

Two automated technology promotion have prioritized due to resource availability. Six will be prioritized next financial year.

Total	619,520
GoU Development	619,520
External Financing	0
AIA	0

Budget Output: 04 Agricultural research capacity strengthened

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
4 research institutes research infrastructure maintained one institute laboratory supported for accreditation 4 laboratory equipment maintained/serviced NARO wide training plan 2021_22 developed	1) Fencing of part of Kigumba land in Kiryandongo District..	Item	Spent
		211103 Allowances (Inc. Casuals, Temporary)	5,833
	2) Construction, Extension of Power-line and reticulation to the Maruzi Farm.	221001 Advertising and Public Relations	634
		221003 Staff Training	164,518
	3) Upgrading the Irrigation Water System.	221004 Recruitment Expenses	24,123
		221006 Commissions and related charges	415
	4) Establishment of a Incubation Hub at Mukono ZARDI .	221008 Computer supplies and Information Technology (IT)	328,518
		221009 Welfare and Entertainment	6,473
	5) Construction of a Screen House at NaFORRI	221011 Printing, Stationery, Photocopying and Binding	34,044
		221012 Small Office Equipment	1,798
	6) Construcion of a Road Network at Nalirri	221016 IFMS Recurrent costs	29,100
		221017 Subscriptions	24,050
		222003 Information and communications technology (ICT)	18,701
		223005 Electricity	877
		223006 Water	4,972
		224004 Cleaning and Sanitation	380
		224006 Agricultural Supplies	80,767
		225001 Consultancy Services- Short term	23,029
		226002 Licenses	11,527
		227001 Travel inland	251,114
		227004 Fuel, Lubricants and Oils	23,763
		228001 Maintenance - Civil	28,898
		228002 Maintenance - Vehicles	16,060
		228003 Maintenance – Machinery, Equipment & Furniture	5,861
		228004 Maintenance – Other	2,005

Reasons for Variation in performance

Total	1,087,461
GoU Development	1,087,461
External Financing	0
AIA	0

Outputs Funded

Budget Output: 51 Payments to International Organisations (CGIAR, ASARECA, WARDA)

Quarterly Compliance to 6 international organizations (CGIAR, ASEREC, FARA, CABI WADRA and BeCA) and autonomous institutions strengthened.	Quarterly compliance to 6 international organizations (CGIAR, ASEREC, FARA, CABI WADRA and BeCA) and autonomous institutions strengthened.	Item	Spent
		262201 Contributions to International Organisations (Capital)	453,071

Reasons for Variation in performance

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	US\$ Thousand
		Total	453,071
		GoU Development	453,071
		External Financing	0
		AIA	0

Capital Purchases

Budget Output: 72 Government Buildings and Administrative Infrastructure

		Item	Spent
One irrigation facility established at Kigumba to demonstrate climate smart agriculture.	Civil works at 100% completion		
Support establishment of Five Agricultural research facilities across four public research	1) Construction of a Hass screen House at NAFORRI.	281504 Monitoring, Supervision & Appraisal of Capital work	267,534
Institutes of NaCCORI multipurpose cocoa and coffee research laboratory, NARL, NaLIRRI multipurpose vaccine research and Production laboratory and Rwebitaba tea research laboratory for efficient delivery of research services to accelerate Agro Industrialization.	2) Construction of road network at NALIRRI	312101 Non-Residential Buildings	3,946,018
	3) Construction of diagnostic laboratory at Kajansi	312102 Residential Buildings	200,000
	4) Mbarara seed sorting facility.	312104 Other Structures	25,212
	5) Construction of Road Network at Nalirri.		
	6) Rehabilitation & Remodelling of NARO Incubation centre at MuZARDI.		
	Others civil works		
	a) NACORI multipurpose laboratory ongoing at 99% . -		
	b) Multi purpose vaccine facility construction at Nakyesasa at 65%. -		
	c) Construction of start up structures (paddock fencing, cattle dip, water reticulation, fencing, toilet hay barn & containers), at Maruzi. - roject work progress at 82%. -		
	d) Namalele Administration block construction at Namalere work progress at 50% complete. -		
	e) Aflasafe plant construction at Nakyesasa Project progress at 80% complete.		

Reasons for Variation in performance

- 1) Construction of a Grain Store and Hay Barn - Procurement process concluded but contract not signed due to limited funds.
- 2) Establishing an irrigation facility NACRR was not done due to lack of funds.
- 3) Some civil works were a spil-over from previous years.
- 4) Slow progress is due contractors not mobilizing construction materials in time.
- 5) Upgrading the Irrigation Water Systems at still in procurement process. It is at awaiting for submission of Designs/Bills of Quantities.

Total	4,438,763
GoU Development	4,438,763
External Financing	0

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
			AIA
			0
Budget Output: 76 Purchase of Office and ICT Equipment, including Software			
One Agricultural intelligence tool acquired to support research decision making.	1) Two digital research platforms developed One on NARO knowledge products developed for technology dissemination One on value chain, digital online plat form developed.	Item	Spent
One Agricultural Research Big data center developed to support data collection management and disseminations.			
Two digital research platforms developed	- Concept not on NARO big data was developed and ready for management approval.		
One NARO knowledge products developed for technology dissemination			
One value chain, digital online plat form developed			
Reasons for Variation in performance			
Work still on going for			
1)Five (5) Agricultural intelligence tools.			
Work differed for:			
1) Six digital research platforms .			
2) Three NARO knowledge products developed for technology dissemination.			
3) Five (5) value chain, digital online.			
			Total
			0
			GoU Development
			0
			External Financing
			0
			AIA
			0
Budget Output: 77 Purchase of Specialised Machinery & Equipment			
Laboratory equipment for one laboratory for invitro and embryo transfer acquired and installed at NaLIRRI Nakyesasa.	Laboratory equipment for one laboratory for invitro and embryo transfer acquired and installed at NaLIRRI Nakyesasa. One workshop at NASARRI equipped to enhance innovation.	Item	Spent
One workshop at NASARRI equipped to enhance innovation.		312214 Laboratory Equipments	1,100,000
Reasons for Variation in performance			
			Total
			1,100,000
			GoU Development
			1,100,000
			External Financing
			0
			AIA
			0
Budget Output: 78 Purchase of Office and Residential Furniture and Fittings			
One agriculture research facility at NaCORRI furnished to create enabling environment for Cocoa and coffee.	One agriculture research facility at NaCORRI furnished to create enabling environment for Cocoa and coffee.	Item	Spent
		312203 Furniture & Fixtures	22,995
Reasons for Variation in performance			
			Total
			22,995

Vote:142 National Agricultural Research Organisation

QUARTER 3: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		GoU Development	22,995
		External Financing	0
		AIA	0
		Total For Project	10,278,839
		GoU Development	10,278,839
		External Financing	0
		AIA	0
		GRAND TOTAL	27,426,825
		Wage Recurrent	8,564,839
		Non Wage Recurrent	7,247,276
		GoU Development	11,614,710
		External Financing	0
		AIA	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

<i>US\$ Thousands</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)		
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Sub-SubProgramme: 51 Agricultural Research

Departments

Department: 01 Headquarters

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

1 Annual performance review conducted, 1 Statistical abstract FY2021/22 developed one physical and budget performance monitoring reports generated to inform management decisions.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	3,498	875	4,373
	221006 Commissions and related charges	16,020	30,000	46,020
	227001 Travel inland	21,250	63,750	85,000
	Total	40,768	94,625	135,393
	Wage Recurrent	0	0	0
	Non Wage Recurrent	40,768	94,625	135,393
	AIA	0	0	0

Budget Output: 02 Research extension interface promoted and strengthened

One web-based technology promotion System developed Two identified technologies protected, Three Intellectual Property management committee (IPMC) engagements coordinated Three IP awareness policy coordinated, 8 Technology licensing agreements signed Two Business plans and proposals developed and 3 digital based technology promotions conducted	Item	Balance b/f	New Funds	Total
	221007 Books, Periodicals & Newspapers	0	3,843	3,843
	221011 Printing, Stationery, Photocopying and Binding	0	50,000	50,000
	221012 Small Office Equipment	1,770	2,000	3,770
	222001 Telecommunications	33,830	50,000	83,830
	222002 Postage and Courier	2,270	2,570	4,840
	223005 Electricity	13,249	12,926	26,175
	223006 Water	0	10,104	10,104
	227001 Travel inland	30	15,750	15,780
	Total	51,149	147,193	198,342
	Wage Recurrent	0	0	0
	Non Wage Recurrent	51,149	147,193	198,342
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

10 NARO staff supported for MScs and PhDs, 1000 acres of NARO secured through titling, Quarterly Compliance to 6 international organizations (CGIAR, ASERECA, FARA, CABI WADRA and BeCA) strengthened, Coordinated Research oversight in the 16 PARIs strengthened to support development of research for products to stimulate industries, Security enhanced in the 16 NARO PARIs, 1 routine facilities maintenance conducted in the 16 Public research institutes	Item	Balance b/f	New Funds	Total
	211102 Contract Staff Salaries	0	8,558,307	8,558,307
	211103 Allowances (Inc. Casuals, Temporary)	152	0	152
	212101 Social Security Contributions	762,736	93,095	855,831
	213001 Medical expenses (To employees)	0	169,373	169,373
	213002 Incapacity, death benefits and funeral expenses	0	322,000	322,000
	213004 Gratuity Expenses	0	2,139,577	2,139,577
	221001 Advertising and Public Relations	869	668	1,537
	221006 Commissions and related charges	0	2,672	2,672
	221008 Computer supplies and Information Technology (IT)	663	662	1,325
	221009 Welfare and Entertainment	22,276	80,368	102,644
	221011 Printing, Stationery, Photocopying and Binding	0	1,027	1,027
	221016 IFMS Recurrent costs	46,340	46,500	92,840
	222001 Telecommunications	0	56	56
	222003 Information and communications technology (ICT)	4,239	3,600	7,839
	223004 Guard and Security services	6,732	2,909	9,641
	223005 Electricity	40	0	40
	224001 Medical Supplies	4,797	0	4,797
	224004 Cleaning and Sanitation	9	2,435	2,444
	224006 Agricultural Supplies	132,661	118,825	251,485
	226001 Insurances	55,000	55,000	110,000
	226002 Licenses	10,000	10,000	20,000
	227001 Travel inland	68,462	69,984	138,447
	227004 Fuel, Lubricants and Oils	22,956	94,533	117,489
	228001 Maintenance - Civil	13,203	16,074	29,277
	228002 Maintenance - Vehicles	599	39,808	40,407
	228003 Maintenance – Machinery, Equipment & Furniture	5,814	18,310	24,124
	228004 Maintenance – Other	3,805	10,000	13,805
	273102 Incapacity,death benefits and funeral expenses	29,200	22,500	51,700
	Total	1,190,552	11,878,282	13,068,834
	Wage Recurrent	0	8,558,307	8,558,307
	Non Wage Recurrent	1,190,552	3,319,974	4,510,527
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Department: 07 National Crops Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

Four technologies for food and nutrition security developed and submitted to the varieties release committee. The varieties have capacity to fight hidden hunger, improve production and productivity and also increase competitiveness agricultural products on mark.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	19,373	19,373
	Total	0	19,373	19,373
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	19,373	19,373
	AIA	0	0	0

Budget Output: 02 Research extension interface promoted and strengthened

Four technologies delivered to uptake path ways for increased production and productivity and accelerated agro industrialization, food security and employment creation.	Item	Balance b/f	New Funds	Total
	221001 Advertising and Public Relations	0	1,480	1,480
	Total	0	1,480	1,480
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	1,480	1,480
	AIA	0	0	0

Budget Output: 04 Agricultural research capacity strengthened

1) Four on-station field research facilities maintained.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	1,480	1,480
2. Two Crop production facilities maintained to create enabling environment for Agriculture research.	221008 Computer supplies and Information Technology (IT)	0	1,368	1,368
	221009 Welfare and Entertainment	0	1,960	1,960
	221011 Printing, Stationery, Photocopying and Binding	0	3,700	3,700
	222001 Telecommunications	0	2,960	2,960
	223004 Guard and Security services	0	4,440	4,440
	223005 Electricity	0	14,800	14,800
	224004 Cleaning and Sanitation	0	2,960	2,960
	226001 Insurances	0	474	474
	227001 Travel inland	0	5,365	5,365
	227004 Fuel, Lubricants and Oils	0	11,100	11,100
	228002 Maintenance - Vehicles	0	11,840	11,840
	228003 Maintenance – Machinery, Equipment & Furniture	0	2,220	2,220
	Total	0	64,667	64,667
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	64,667	64,667
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Department: 08 National Fisheries Resources Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

4,125 brood stock of fisheries resources acquired for sustainable seed production and Breeding that is; Two thousand five hundred (2500) Tilapia, Five thousand (1,000) catfish, One thousand (250) mirror carp and Five hundred (500) Barbus.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	4,687	4,687
	224006 Agricultural Supplies	0	3,903	3,903
	227001 Travel inland	0	1,558	1,558
	227004 Fuel, Lubricants and Oils	0	2,524	2,524
	Total	0	12,671	12,671
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	12,671	12,671
	AIA	0	0	0

Budget Output: 04 Agricultural research capacity strengthened

1 fish laboratory and one aquarium maintained & operationalized, Fisheries Premises and assets protected/guarded for improved safety	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	13,761	13,761
	221001 Advertising and Public Relations	0	4,476	4,476
	221007 Books, Periodicals & Newspapers	0	2,491	2,491
	221008 Computer supplies and Information Technology (IT)	0	673	673
	221009 Welfare and Entertainment	0	3,395	3,395
	221011 Printing, Stationery, Photocopying and Binding	0	4,222	4,222
	222001 Telecommunications	0	2,116	2,116
	222003 Information and communications technology (ICT)	0	6,563	6,563
	223004 Guard and Security services	0	5,914	5,914
	223005 Electricity	0	6,564	6,564
	223006 Water	0	4,088	4,088
	224004 Cleaning and Sanitation	0	4,040	4,040
	226001 Insurances	0	544	544
	227001 Travel inland	0	6,073	6,073
	227004 Fuel, Lubricants and Oils	0	8,598	8,598
	228001 Maintenance - Civil	0	3,367	3,367
	228002 Maintenance - Vehicles	0	5,896	5,896
	228003 Maintenance – Machinery, Equipment & Furniture	0	5,320	5,320
	Total	0	88,097	88,097
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	88,097	88,097
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Department: 09 National Forestry Resources Research Institute

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

50 farmers exposed to salient tree-crop interactions different farming systems	Item	Balance b/f	New Funds	Total
50 Stakeholder equipped with best agronomic practices for production of quality avocado and annona germplasm	221001 Advertising and Public Relations	0	1,084	1,084
	221007 Books, Periodicals & Newspapers	0	867	867
	221008 Computer supplies and Information Technology (IT)	0	1,807	1,807
	Total	0	3,758	3,758
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	3,758	3,758
	AIA	0	0	0

Budget Output: 04 Agricultural research capacity strengthened

Institute capacity to support agricultural research and innovations enhanced through routine maintenance of vital research support components (infrastructure, equipment, machinery, vehicles, computers & ICT); re-tooling and guidance of staff	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	6,394	6,394
	221003 Staff Training	0	1,446	1,446
	221009 Welfare and Entertainment	0	2,168	2,168
	221011 Printing, Stationery, Photocopying and Binding	0	3,613	3,613
	222001 Telecommunications	0	723	723
	222002 Postage and Courier	0	289	289
	222003 Information and communications technology (ICT)	0	6,812	6,812
	223004 Guard and Security services	0	7,226	7,226
	223005 Electricity	0	10,507	10,507
	224004 Cleaning and Sanitation	0	5,949	5,949
	224005 Uniforms, Beddings and Protective Gear	0	723	723
	227001 Travel inland	0	5,780	5,780
	227004 Fuel, Lubricants and Oils	0	7,074	7,074
	228001 Maintenance - Civil	0	3,252	3,252
	228002 Maintenance - Vehicles	0	6,411	6,411
	228003 Maintenance – Machinery, Equipment & Furniture	0	2,529	2,529
	Total	0	70,892	70,892
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	70,892	70,892
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Department: 10 National Livestock Resources Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

	Item	Balance b/f	New Funds	Total
One anti-tick candidate vaccine molecule validated in various agro-ecological zones of Uganda. One broad-spectrum chimeric anti-tick vaccine formulated & evaluated Two FMD candidate vaccines evaluated. One African swine fever candidate vaccine evaluated on station	211103 Allowances (Inc. Casuals, Temporary)	0	71,892	71,892
	221003 Staff Training	0	23,885	23,885
	221017 Subscriptions	0	8,998	8,998
	222003 Information and communications technology (ICT)	0	32,487	32,487
	223004 Guard and Security services	0	6,664	6,664
	223005 Electricity	0	60,284	60,284
	224001 Medical Supplies	0	77,611	77,611
	224004 Cleaning and Sanitation	0	15,542	15,542
	224005 Uniforms, Beddings and Protective Gear	0	12,820	12,820
	224006 Agricultural Supplies	0	115,475	115,475
	225001 Consultancy Services- Short term	0	20,825	20,825
	227001 Travel inland	0	38,318	38,318
	227004 Fuel, Lubricants and Oils	0	49,980	49,980
	228001 Maintenance - Civil	0	33,320	33,320
	228002 Maintenance - Vehicles	0	58,310	58,310
	228003 Maintenance – Machinery, Equipment & Furniture	0	65,391	65,391
	Total	0	691,800	691,800
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	691,800	691,800
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

3 livestock laboratories and one forage conservation facility maintained. Herbarium and two on-station field research facilities maintained. 10 research and production facilities maintained. Livestock laboratories and one forage conservation facility maintained. Herbarium and two on-station field research facilities maintained. 10 research and production facilities maintained.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	26,784	26,784
	221001 Advertising and Public Relations	0	2,715	2,715
	221007 Books, Periodicals & Newspapers	0	362	362
	221008 Computer supplies and Information Technology (IT)	0	3,620	3,620
	221009 Welfare and Entertainment	0	5,429	5,429
	221011 Printing, Stationery, Photocopying and Binding	0	5,791	5,791
	221012 Small Office Equipment	0	1,564	1,564
	222001 Telecommunications	0	1,448	1,448
	223005 Electricity	0	2,172	2,172
	224004 Cleaning and Sanitation	0	3,258	3,258
	226001 Insurances	0	464	464
	227001 Travel inland	0	2,974	2,974
	227004 Fuel, Lubricants and Oils	0	7,239	7,239
	228001 Maintenance - Civil	0	2,009	2,009
	228002 Maintenance - Vehicles	0	6,515	6,515
	228003 Maintenance – Machinery, Equipment & Furniture	0	2,425	2,425
	273102 Incapacity, death benefits and funeral expenses	0	7,239	7,239
	Total	0	82,005	82,005
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	82,005	82,005
	AIA	0	0	0

Department: 11 National Semi arid Resources Research

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

5 sesame lines evaluated, 10 accessions of cowpea and 5 of pigeon pea characterized, one suitable soil & water conservation strategy generated & recommended for cotton production, Two farmer preferred cotton lines with industrial attributes identified	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	10,038	10,038
	224006 Agricultural Supplies	0	11,783	11,783
	227001 Travel inland	0	29,737	29,737
	227004 Fuel, Lubricants and Oils	0	11,217	11,217
	Total	0	62,774	62,774
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	62,774	62,774
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

	Item	Balance b/f	New Funds	Total
14 acres of compound mowed and 3 office blocks maintained to create enabling environment for research	211103 Allowances (Inc. Casuals, Temporary)	0	9,906	9,906
One dissemination workshops conducted,	213002 Incapacity, death benefits and funeral expenses	0	2,901	2,901
3 scientific committee meetings conducted to guide research	221001 Advertising and Public Relations	0	2,901	2,901
	221007 Books, Periodicals & Newspapers	0	2,176	2,176
	221008 Computer supplies and Information Technology (IT)	0	4,802	4,802
	221009 Welfare and Entertainment	0	4,352	4,352
	221011 Printing, Stationery, Photocopying and Binding	0	5,077	5,077
	222001 Telecommunications	0	1,451	1,451
	223004 Guard and Security services	0	4,352	4,352
	223005 Electricity	0	7,252	7,252
	223006 Water	0	1,451	1,451
	224004 Cleaning and Sanitation	0	4,352	4,352
	226001 Insurances	0	440	440
	227001 Travel inland	0	5,104	5,104
	227004 Fuel, Lubricants and Oils	0	3,852	3,852
	228002 Maintenance - Vehicles	0	5,802	5,802
	Total	0	66,166	66,166
	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>0</i>	<i>66,166</i>	<i>66,166</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Department: 12 National Laboratories Research

Outputs Provided

Budget Output: 01 Generation of agricultrual technologies

3 Value added product from maize, beans, vegetables for commercialization developed. Propagation systems developed for two plant genetic resources,500 genotypes from banana Hybrid seed generated.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	13,950	13,950
	221009 Welfare and Entertainment	0	543	543
	221011 Printing, Stationery, Photocopying and Binding	0	2,378	2,378
	222001 Telecommunications	0	418	418
	223005 Electricity	0	6,015	6,015
	224004 Cleaning and Sanitation	0	626	626
	224006 Agricultural Supplies	0	77,166	77,166
	227001 Travel inland	0	40,203	40,203
	227004 Fuel, Lubricants and Oils	0	3,875	3,875
	228002 Maintenance - Vehicles	0	501	501
	228003 Maintenance – Machinery, Equipment & Furniture	0	1,252	1,252
	Total	0	146,923	146,923
Wage Recurrent		0	0	0
Non Wage Recurrent		0	146,923	146,923
AIA		0	0	0

Budget Output: 02 Research extension interface promoted and strengthened

One batch of Agriculture Research Information Education Communication material developed and disseminated.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	4,900	4,900
	221011 Printing, Stationery, Photocopying and Binding	0	5,680	5,680
	224006 Agricultural Supplies	0	77,100	77,100
	227001 Travel inland	0	15,500	15,500
Total		0	103,180	103,180
Wage Recurrent		0	0	0
Non Wage Recurrent		0	103,180	103,180
AIA		0	0	0

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QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

One research management committees conducted to guide research Procedure for application of procedures and policies Institution machinery and equipment maintained.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	33,892	33,892
	221001 Advertising and Public Relations	0	7,695	7,695
	221003 Staff Training	0	5,500	5,500
	221007 Books, Periodicals & Newspapers	0	2,003	2,003
	221008 Computer supplies and Information Technology (IT)	0	9,065	9,065
	221009 Welfare and Entertainment	0	7,796	7,796
	221011 Printing, Stationery, Photocopying and Binding	0	7,510	7,510
	221012 Small Office Equipment	0	2,086	2,086
	222001 Telecommunications	0	1,440	1,440
	222002 Postage and Courier	0	211	211
	223004 Guard and Security services	0	16,714	16,714
	223005 Electricity	0	18,757	18,757
	227001 Travel inland	0	19,732	19,732
	227004 Fuel, Lubricants and Oils	0	21,489	21,489
	228001 Maintenance - Civil	0	3,721	3,721
	228002 Maintenance - Vehicles	0	16,996	16,996
	228003 Maintenance – Machinery, Equipment & Furniture	0	4,763	4,763
	228004 Maintenance – Other	0	2,712	2,712
	Total	0	182,077	182,077
Wage Recurrent		0	0	0
Non Wage Recurrent		0	182,077	182,077
AIA		0	0	0

Department: 13 Abi ZARDI

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

Two technology generated for increased production and productivity Two innovation developed for increased production and productivity of priority commodities to support agro-industrialisation.	Item	Balance b/f	New Funds	Total
	221001 Advertising and Public Relations	0	3,955	3,955
	221008 Computer supplies and Information Technology (IT)	0	2,637	2,637
	221011 Printing, Stationery, Photocopying and Binding	0	2,637	2,637
	Total	0	9,228	9,228
Wage Recurrent		0	0	0
Non Wage Recurrent		0	9,228	9,228
AIA		0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

	Item	Balance b/f	New Funds	Total
One advisory committee and PARI directors forum, institute committee meetings conducted to guide and redirect research.	211103 Allowances (Inc. Casuals, Temporary)	0	7,864	7,864
	221008 Computer supplies and Information Technology (IT)	0	1,318	1,318
One 02) review and planning meeting held to guide to guide and redirect research.	221011 Printing, Stationery, Photocopying and Binding	0	2,637	2,637
	222001 Telecommunications	0	7,200	7,200
	223004 Guard and Security services	0	1,975	1,975
	223005 Electricity	0	5,108	5,108
	223006 Water	0	1,978	1,978
	224004 Cleaning and Sanitation	0	1,978	1,978
	224006 Agricultural Supplies	0	3,955	3,955
	226001 Insurances	0	570	570
	227001 Travel inland	0	7,909	7,909
	227004 Fuel, Lubricants and Oils	0	3,818	3,818
	228001 Maintenance - Civil	0	3,296	3,296
	Total	0	49,603	49,603
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	49,603	49,603
	AIA	0	0	0

Department: 14 Bulindi ZARDI

Outputs Provided

Budget Output: 02 Research extension interface promoted and strengthened

	Item	Balance b/f	New Funds	Total
One technology dissemination Campaign conducted in the zone to improve production, productivity and agro based industries.	224001 Medical Supplies	0	1,400	1,400
	224006 Agricultural Supplies	0	2,250	2,250
	Total	0	3,650	3,650
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	3,650	3,650
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

Strategically focused research activities supported by 1 advisory meeting 2 technologies availed to farmers for Improved linkage between Bulindi ZARDI, and the communities. 1 Annual report generated, disseminated and archived Equip the institution ICT facilities of the institute	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	3,903	3,903
	221001 Advertising and Public Relations	0	5,055	5,055
	221007 Books, Periodicals & Newspapers	0	472	472
	221008 Computer supplies and Information Technology (IT)	0	6,740	6,740
	221009 Welfare and Entertainment	0	2,620	2,620
	221011 Printing, Stationery, Photocopying and Binding	0	3,370	3,370
	221012 Small Office Equipment	0	3,370	3,370
	223005 Electricity	0	7,110	7,110
	224001 Medical Supplies	0	600	600
	224006 Agricultural Supplies	0	1,786	1,786
	226001 Insurances	0	674	674
	227001 Travel inland	0	4,381	4,381
	227004 Fuel, Lubricants and Oils	0	5,026	5,026
	228002 Maintenance - Vehicles	0	8,425	8,425
	Total	0	53,531	53,531
Wage Recurrent		0	0	0
Non Wage Recurrent		0	53,531	53,531
AIA		0	0	0

Department: 15 Kachwekano ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

5 sorghum genotypes generated 2 demonstration sites established in 6 districts in SWHAEZ	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	1,062	1,062
	224001 Medical Supplies	0	6,144	6,144
	227001 Travel inland	0	3,563	3,563
	227004 Fuel, Lubricants and Oils	0	1,470	1,470
Total		0	12,238	12,238
Wage Recurrent		0	0	0
Non Wage Recurrent		0	12,238	12,238
AIA		0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 02 Research extension interface promoted and strengthened

2 Demonstration site established in 1 districts in SWHAEZ with at least 3 new potato varieties introduced	Item	Balance b/f	New Funds	Total
	221001 Advertising and Public Relations	0	2,488	2,488
	224006 Agricultural Supplies	0	659	659
	Total	0	3,147	3,147
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	3,147	3,147
	AIA	0	0	0

Budget Output: 04 Agricultural research capacity strengthened

Enhancing institutional research capacity, safe through routine monitoring (4trips), safe guarding assets, servicing of computers (20times) and infrastructure vehicles(7) machinery (4) maintenance .	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	4,236	4,236
	221001 Advertising and Public Relations	0	1,317	1,317
	221007 Books, Periodicals & Newspapers	0	481	481
	221008 Computer supplies and Information Technology (IT)	0	2,351	2,351
	221009 Welfare and Entertainment	0	3,451	3,451
	221011 Printing, Stationery, Photocopying and Binding	0	1,976	1,976
	221012 Small Office Equipment	0	659	659
	222001 Telecommunications	0	527	527
	223005 Electricity	0	4,939	4,939
	223006 Water	0	1,647	1,647
	224004 Cleaning and Sanitation	0	5,061	5,061
	226001 Insurances	0	330	330
	227001 Travel inland	0	3,428	3,428
	227004 Fuel, Lubricants and Oils	0	4,939	4,939
	228002 Maintenance - Vehicles	0	3,952	3,952
	Total	0	39,291	39,291
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	39,291	39,291
	AIA	0	0	0

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Department: 16 Mukono ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

	Item	Balance b/f	New Funds	Total
1 agronomic practices of indigenous tomato, onions and Bambara nuts cultivars established	221011 Printing, Stationery, Photocopying and Binding	0	5,700	5,700
1 effective weed management options for groundnuts production identified and packaged for	222001 Telecommunications	0	2,036	2,036
	223004 Guard and Security services	0	13,029	13,029
	223005 Electricity	0	20,357	20,357
	223006 Water	0	2,443	2,443
	224006 Agricultural Supplies	0	10,177	10,177
	227001 Travel inland	0	3,257	3,257
	227004 Fuel, Lubricants and Oils	0	12,215	12,215
	Total	0	69,213	69,213
	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>0</i>	<i>69,213</i>	<i>69,213</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Budget Output: 02 Research extension interface promoted and strengthened

	Item	Balance b/f	New Funds	Total
30 key market chain actors identified.	211103 Allowances (Inc. Casuals, Temporary)	0	1,250	1,250
1 potential market opportunities analyzed				
250 stakeholders reached	224006 Agricultural Supplies	0	2,000	2,000
2 partnerships established				
1 potential market opportunities analyzed	Total	0	3,250	3,250
250stakeholders engaged for improved technology promotion	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>0</i>	<i>3,250</i>	<i>3,250</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

One potential market opportunities analyzed 1 M&E report brief developed to guide management of research 1 partnership established 1000 stakeholders reached and 2 partnerships established 120 key market chain actors identified	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	4,143	4,143
	221001 Advertising and Public Relations	0	4,386	4,386
	221003 Staff Training	0	1,500	1,500
	221007 Books, Periodicals & Newspapers	0	1,629	1,629
	221008 Computer supplies and Information Technology (IT)	0	6,468	6,468
	221009 Welfare and Entertainment	0	4,886	4,886
	221011 Printing, Stationery, Photocopying and Binding	0	1,629	1,629
	222002 Postage and Courier	0	1,222	1,222
	224004 Cleaning and Sanitation	0	10,004	10,004
	226001 Insurances	0	570	570
	228001 Maintenance - Civil	0	10,559	10,559
	228002 Maintenance - Vehicles	0	10,308	10,308
	228003 Maintenance – Machinery, Equipment & Furniture	0	4,479	4,479
	228004 Maintenance – Other	0	2,036	2,036
	273102 Incapacity, death benefits and funeral expenses	0	1,222	1,222
	Total	0	65,038	65,038
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	65,038	65,038
	AIA	0	0	0

Department: 17 Ngetta ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

1 mango fruit fly IPM strategy developed 1 effective technique for estimating weed seed quantity and type in soil developed 1 integrated approach for managing weeds in maize under CA systems developed	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	1,771	1,771
	221001 Advertising and Public Relations	0	1,740	1,740
	221011 Printing, Stationery, Photocopying and Binding	0	103	103
	222001 Telecommunications	0	578	578
	224001 Medical Supplies	0	2,106	2,106
	224006 Agricultural Supplies	0	7,627	7,627
	227001 Travel inland	0	6,851	6,851
	Total	0	20,775	20,775
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	20,775	20,775
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 02 Research extension interface promoted and strengthened

One technology for food, nutrition and industry promoted with in the zone	Item	Balance b/f	New Funds	Total
	221001 Advertising and Public Relations	0	672	672
	221008 Computer supplies and Information Technology (IT)	0	2,016	2,016
	224006 Agricultural Supplies	0	5,010	5,010
	Total	0	7,697	7,697
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	7,697	7,697
	AIA	0	0	0

Budget Output: 04 Agricultural research capacity strengthened

Institutional research infrastructures maintained to aid research for products and industry. Research undertakings quidded and redirected through one research committee meeting.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	143	143
	221008 Computer supplies and Information Technology (IT)	0	3,427	3,427
	221011 Printing, Stationery, Photocopying and Binding	0	1,680	1,680
	222001 Telecommunications	0	336	336
	223004 Guard and Security services	0	6,047	6,047
	223005 Electricity	0	2,305	2,305
	223006 Water	0	2,590	2,590
	224004 Cleaning and Sanitation	0	1,680	1,680
	227001 Travel inland	0	4,300	4,300
	227004 Fuel, Lubricants and Oils	0	5,374	5,374
	228002 Maintenance - Vehicles	0	5,375	5,375
	Total	0	33,256	33,256
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	33,256	33,256
	AIA	0	0	0

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QUARTER 4: Revised Workplan

Department: 18 Nabium ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

250 kgs of better performing pasture seed (8 acres of planting material) species (Chloris gayana, Centrocema, for increased production and productivity of livestock	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	5,499	5,499
	221001 Advertising and Public Relations	0	220	220
115 cattles; 30 Sahiwal and 15 friesian cattle crosses and 70 zebu cattle multiplied on-station to increase availability to farmers	221008 Computer supplies and Information Technology (IT)	0	960	960
	221011 Printing, Stationery, Photocopying and Binding	0	438	438
	224001 Medical Supplies	0	2,340	2,340
	224006 Agricultural Supplies	0	3,812	3,812
	227001 Travel inland	0	1,535	1,535
	227004 Fuel, Lubricants and Oils	0	1,683	1,683
	228002 Maintenance - Vehicles	0	1,296	1,296
	Total	0	17,781	17,781
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	17,781	17,781
	AIA	0	0	0

Budget Output: 02 Research extension interface promoted and strengthened

Promotion and popularization of 1 selected crop, natural resources and animal value chain products and bi-products in NEAZ	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	455	455
	221001 Advertising and Public Relations	0	202	202
	221003 Staff Training	0	135	135
	221008 Computer supplies and Information Technology (IT)	0	202	202
	221011 Printing, Stationery, Photocopying and Binding	0	202	202
	224001 Medical Supplies	0	505	505
	224006 Agricultural Supplies	0	842	842
	227001 Travel inland	0	404	404
	227004 Fuel, Lubricants and Oils	0	202	202
	228002 Maintenance - Vehicles	0	270	270
	Total	0	3,418	3,418
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	3,418	3,418
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 04 Agricultural research capacity strengthened

Local, regional, national and international cooperation on and access to science, technology, innovation and knowledge sharing enhanced.	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	3,899	3,899
	221001 Advertising and Public Relations	0	539	539
	221007 Books, Periodicals & Newspapers	0	337	337
	221009 Welfare and Entertainment	0	1,010	1,010
	221011 Printing, Stationery, Photocopying and Binding	0	1,347	1,347
	222002 Postage and Courier	0	218	218
	223004 Guard and Security services	0	2,330	2,330
	223005 Electricity	0	1,523	1,523
	224004 Cleaning and Sanitation	0	1,452	1,452
	224005 Uniforms, Beddings and Protective Gear	0	428	428
	226001 Insurances	0	258	258
	227001 Travel inland	0	2,020	2,020
	227004 Fuel, Lubricants and Oils	0	4,809	4,809
	228001 Maintenance - Civil	0	2,693	2,693
	228002 Maintenance - Vehicles	0	6,733	6,733
	228003 Maintenance – Machinery, Equipment & Furniture	0	2,693	2,693
	273102 Incapacity, death benefits and funeral expenses	0	539	539
	Total	0	32,824	32,824
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	32,824	32,824
	AIA	0	0	0

Department: 19 Mbarara ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

1 Carbohydrate and cellulose digesting bacteria isolated 1 detailed research protocol developed. 1 research protocol developed and pretested in 5 farmer groups of 2 districts 1 appropriate formula of carbohydrate & cellulose digesting bacteria packaged	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	6,034	6,034
	223004 Guard and Security services	0	330	330
	224001 Medical Supplies	0	4,946	4,946
	224006 Agricultural Supplies	0	6,694	6,694
	227001 Travel inland	0	4,452	4,452
	227004 Fuel, Lubricants and Oils	0	2,473	2,473
	Total	0	24,928	24,928
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	24,928	24,928
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Budget Output: 02 Research extension interface promoted and strengthened

Four research technologies delivered to uptake pathways for increased production and productivity.	Item	Balance b/f	New Funds	Total
	222003 Information and communications technology (ICT)	0	1,194	1,194
	224006 Agricultural Supplies	0	2,785	2,785
	Total	0	3,979	3,979
	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>0</i>	<i>3,979</i>	<i>3,979</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Budget Output: 04 Agricultural research capacity strengthened

Maintenance of institute IT infrastructures 15 institute research facilities maintained Assorted institute machinery maintained 1round in the quarter	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	1,957	1,957
	221001 Advertising and Public Relations	0	1,085	1,085
	221008 Computer supplies and Information Technology (IT)	0	1,649	1,649
	221009 Welfare and Entertainment	0	1,979	1,979
	221011 Printing, Stationery, Photocopying and Binding	0	2,638	2,638
	222001 Telecommunications	0	660	660
	223004 Guard and Security services	0	3,957	3,957
	223005 Electricity	0	2,638	2,638
	223006 Water	0	1,319	1,319
	224004 Cleaning and Sanitation	0	2,638	2,638
	226001 Insurances	0	399	399
	227001 Travel inland	0	3,957	3,957
	227004 Fuel, Lubricants and Oils	0	3,295	3,295
	228001 Maintenance - Civil	0	989	989
	228002 Maintenance - Vehicles	0	3,877	3,877
	228003 Maintenance – Machinery, Equipment & Furniture	0	989	989
	Total	0	34,023	34,023
	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>0</i>	<i>34,023</i>	<i>34,023</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Vote:142 National Agricultural Research Organisation

QUARTER 4: Revised Workplan

Department: 20 Buginyaya ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

2 effective foundation seed systems for Orange Fleshed Sweet Potato validated & promoted for utilization of Vit A rich food in Busoga sub region	Item	Balance b/f	New Funds	Total
2 of elite breeders seed for niche products of elite arabica coffee & brewing cassava varieties availed	211103 Allowances (Inc. Casuals, Temporary)	0	4,902	4,902
	221011 Printing, Stationery, Photocopying and Binding	0	393	393
	224001 Medical Supplies	0	2,841	2,841
	224006 Agricultural Supplies	0	13,075	13,075
	227001 Travel inland	0	9,037	9,037
	227004 Fuel, Lubricants and Oils	0	4,058	4,058
	228002 Maintenance - Vehicles	0	604	604
	Total	0	34,908	34,908
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	34,908	34,908
	AIA	0	0	0

Budget Output: 02 Research extension interface promoted and strengthened

One fish farmers supported in improved fish farming	Item	Balance b/f	New Funds	Total
Two niche products and accompanying productivity improvement identified	211103 Allowances (Inc. Casuals, Temporary)	0	5,799	5,799
Economic value from use of new coffee berry disease disease management options in Mt. Elgon	221011 Printing, Stationery, Photocopying and Binding	0	478	478
	224001 Medical Supplies	0	3,034	3,034
	224006 Agricultural Supplies	0	13,313	13,313
	227001 Travel inland	0	11,001	11,001
	227004 Fuel, Lubricants and Oils	0	5,463	5,463
	Total	0	39,086	39,086
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	39,086	39,086
	AIA	0	0	0

Vote:142 National Agricultural Research Organisation

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Budget Output: 04 Agricultural research capacity strengthened

1 agriculture technologies developed & disseminated, 1 agriculture technologies developed & disseminated for uptake	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	8,544	8,544
	221007 Books, Periodicals & Newspapers	0	1,221	1,221
	221009 Welfare and Entertainment	0	814	814
	221011 Printing, Stationery, Photocopying and Binding	0	2,848	2,848
	221012 Small Office Equipment	0	1,628	1,628
	222001 Telecommunications	0	3,255	3,255
	222003 Information and communications technology (ICT)	0	3,255	3,255
	223004 Guard and Security services	0	4,069	4,069
	223005 Electricity	0	2,441	2,441
	223006 Water	0	2,441	2,441
	224004 Cleaning and Sanitation	0	2,035	2,035
	226001 Insurances	0	814	814
	227001 Travel inland	0	4,066	4,066
	227004 Fuel, Lubricants and Oils	0	6,125	6,125
	228001 Maintenance - Civil	0	2,034	2,034
	228002 Maintenance - Vehicles	0	6,103	6,103
	228003 Maintenance – Machinery, Equipment & Furniture	0	2,035	2,035
	228004 Maintenance – Other	0	2,035	2,035
	273102 Incapacity, death benefits and funeral expenses	0	814	814
	Total	0	56,572	56,572
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	56,572	56,572
	AIA	0	0	0

Department: 21 Rwebitaba ZARDI

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

250 open pollinated seeds collected from selected 2 elite parents from the existing germplasm conserved identified 10 tea clones characterized for biochemical attributes	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	21,631	21,631
	221011 Printing, Stationery, Photocopying and Binding	0	7,927	7,927
	224001 Medical Supplies	0	7,099	7,099
	224006 Agricultural Supplies	0	54,905	54,905
	227001 Travel inland	0	18,439	18,439
	228002 Maintenance - Vehicles	0	6,862	6,862
	228003 Maintenance – Machinery, Equipment & Furniture	0	2,500	2,500
	Total	0	119,362	119,362
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	119,362	119,362
	AIA	0	0	0

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Budget Output: 02 Research extension interface promoted and strengthened

1 tons and 1.5 tons of potato and bean foundation seed respectively harvested and availed to community seed systems/ local seed	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	1,161	1,161
	221011 Printing, Stationery, Photocopying and Binding	0	265	265
	224006 Agricultural Supplies	0	7,401	7,401
	227001 Travel inland	0	829	829
	Total	0	9,656	9,656
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	9,656	9,656
	AIA	0	0	0

Budget Output: 04 Agricultural research capacity strengthened

One Advisory committee, one PARI director's forum meetings and and 3 institute committee meetings held to guide research activities The institute machinery and equipment maintained The institute research facilities maintained	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	5,160	5,160
	213002 Incapacity, death benefits and funeral expenses	0	669	669
	221007 Books, Periodicals & Newspapers	0	796	796
	221009 Welfare and Entertainment	0	1,592	1,592
	221011 Printing, Stationery, Photocopying and Binding	0	1,989	1,989
	222001 Telecommunications	0	995	995
	223004 Guard and Security services	0	1,459	1,459
	223005 Electricity	0	1,592	1,592
	223006 Water	0	4,145	4,145
	224004 Cleaning and Sanitation	0	2,918	2,918
	224005 Uniforms, Beddings and Protective Gear	0	995	995
	226001 Insurances	0	176	176
	227001 Travel inland	0	6,218	6,218
	227004 Fuel, Lubricants and Oils	0	3,647	3,647
	228001 Maintenance - Civil	0	995	995
	228002 Maintenance - Vehicles	0	897	897
	Total	0	34,238	34,238
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	34,238	34,238
	AIA	0	0	0

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Department: 26 NARO Internal Audit

Outputs Provided

Budget Output: 03 Internal Audit

	Item	Balance b/f	New Funds	Total
1 end of year annual Audit performance workshop conducted	221003 Staff Training	0	2,800	2,800
Two Audit reports developed: One Off budget project audit report	227001 Travel inland	18,052	52,200	70,252
One audit report on assets utilization and safety, compliance with PPDA Act report produced.				
One ICT , Human Resource and CGS value for money audit report produced				
	Total	18,052	55,000	73,052
	Wage Recurrent	0	0	0
	Non Wage Recurrent	18,052	55,000	73,052
	AIA	0	0	0

Department: 27 National Coffee Research Institute

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

	Item	Balance b/f	New Funds	Total
One high value coffee & cocoa products prototypes developed	211103 Allowances (Inc. Casuals, Temporary)	0	2,437	2,437
5 putative red blister resistant, 2 putative BCTB tolerant and 5 putative drought tolerant accessions collected cloned for phenotyping	221001 Advertising and Public Relations	0	1,108	1,108
5,000 TC-derived coffee plantlets produced & delivered. Ide	221007 Books, Periodicals & Newspapers	0	2,030	2,030
	221011 Printing, Stationery, Photocopying and Binding	0	118	118
	224006 Agricultural Supplies	0	4,895	4,895
	225001 Consultancy Services- Short term	0	14,141	14,141
	227001 Travel inland	0	13,259	13,259
	227004 Fuel, Lubricants and Oils	0	2,556	2,556
	Total	0	40,541	40,541
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	40,541	40,541
	AIA	0	0	0

Budget Output: 02 Research extension interface promoted and strengthened

	Item	Balance b/f	New Funds	Total
Research and extension interface promoted and strengthened through maintenance of ITC infrastructure	221008 Computer supplies and Information Technology (IT)	0	1,772	1,772
Promotion of better coffee varieties				
	Total	0	1,772	1,772
	Wage Recurrent	0	0	0
	Non Wage Recurrent	0	1,772	1,772
	AIA	0	0	0

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Budget Output: 04 Agricultural research capacity strengthened

Research capacity strengthened through One 1 (01) advisory committee meetings, routine maintenance of research infrastructure, machinery and equipment, securing research activity sites and motivating staff notify more CWD pathogen specific primers	Item	Balance b/f	New Funds	Total
	211103 Allowances (Inc. Casuals, Temporary)	0	7,178	7,178
	221001 Advertising and Public Relations	0	1,846	1,846
	227004 Fuel, Lubricants and Oils	0	33,118	33,118
	Total	0	42,142	42,142
	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>0</i>	<i>42,142</i>	<i>42,142</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Development Projects

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

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

60 elite calves produced to constitute the elite research and embryo production herd at NaLIRRI	Item	Balance b/f	New Funds	Total
Five hundred (500) tons of silage and hay produced to support livestock dry season farming for improved production and productivity	211103 Allowances (Inc. Casuals, Temporary)	0	10,000	10,000
50 tons of grain soya, maize and sunflower produced MT tons	224001 Medical Supplies	0	15,000	15,000
	224006 Agricultural Supplies	0	15,000	15,000
	227001 Travel inland	0	5,000	5,000
	227004 Fuel, Lubricants and Oils	0	10,000	10,000
	228002 Maintenance - Vehicles	0	5,000	5,000
	Total	0	60,000	60,000
	<i>GoU Development</i>	<i>0</i>	<i>60,000</i>	<i>60,000</i>
	<i>External Financing</i>	<i>0</i>	<i>60,000</i>	<i>60,000</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Capital Purchases

Budget Output: 72 Government Buildings and Administrative Infrastructure

One gender and equity responsive office block with a store renovated at Nakyesasa.	Item	Balance b/f	New Funds	Total
One all inclusive administration block constructed at Maruzi.	312101 Non-Residential Buildings	4,238	849,454	853,692
One hay barn constructed at Nakyesasa	312102 Residential Buildings	0	599,687	599,687
500 meter tarmack initiated for increased access to the facilities established.	312104 Other Structures	0	180,000	180,000
	Total	4,238	1,629,141	1,633,379
	<i>GoU Development</i>	<i>4,238</i>	<i>1,629,141</i>	<i>1,633,379</i>
	<i>External Financing</i>	<i>0</i>	<i>1,629,141</i>	<i>1,629,141</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

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Project: 1619 Retooling of National Agricultural Research Organization

Outputs Provided

Budget Output: 01 Generation of agricultural technologies

50 technologies generated, 20 innovations developed to support improved production and productivity for accelerated agro Industrialization.

Item	Balance b/f	New Funds	Total
211103 Allowances (Inc. Casuals, Temporary)	77,605	179,242	256,847
221001 Advertising and Public Relations	56,822	10,950	67,772
221002 Workshops and Seminars	0	200,000	200,000
221003 Staff Training	10,419	32,020	42,439
221006 Commissions and related charges	0	141	141
221008 Computer supplies and Information Technology (IT)	8,725	10,504	19,229
221011 Printing, Stationery, Photocopying and Binding	1,847	26,354	28,200
222001 Telecommunications	0	185	185
222003 Information and communications technology (ICT)	66,365	165,325	231,690
223005 Electricity	0	6,160	6,160
223006 Water	0	822	822
224001 Medical Supplies	4,108	118,721	122,829
224005 Uniforms, Beddings and Protective Gear	0	571	571
224006 Agricultural Supplies	508,209	2,124,378	2,632,587
225001 Consultancy Services- Short term	2,153	52,959	55,112
227001 Travel inland	234,821	365,472	600,294
227004 Fuel, Lubricants and Oils	5,204	52,823	58,027
228002 Maintenance - Vehicles	4,200	16,020	20,220
228003 Maintenance – Machinery, Equipment & Furniture	0	3,768	3,768
Total	980,477	3,366,416	4,346,893
GoU Development	980,477	3,366,416	4,346,893
External Financing	0	3,366,416	3,366,416
AIA	0	0	0

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QUARTER 4: Revised Workplan

Budget Output: 02 Research extension interface promoted and strengthened

Two technology promotion interfaces conducted	Item	Balance b/f	New Funds	Total
Two automated technology promotion tools developed	211103 Allowances (Inc. Casuals, Temporary)	1,270	77,010	78,281
34 technological innovations delivered to uptake pathways	221001 Advertising and Public Relations	19,815	84,352	104,167
5 partnerships developed for technology multiplication and promotion	221002 Workshops and Seminars	0	261,000	261,000
	221003 Staff Training	1,826	17,277	19,103
	221007 Books, Periodicals & Newspapers	0	1,521	1,521
	221008 Computer supplies and Information Technology (IT)	0	11,961	11,961
	221011 Printing, Stationery, Photocopying and Binding	237	21,955	22,192
	222001 Telecommunications	0	203	203
	222003 Information and communications technology (ICT)	13,196	102,420	115,616
	224001 Medical Supplies	0	6,776	6,776
	224006 Agricultural Supplies	0	208,706	208,706
	227001 Travel inland	97,309	151,599	248,908
	227004 Fuel, Lubricants and Oils	2,945	5,537	8,482
	228001 Maintenance - Civil	0	86,855	86,855
	228002 Maintenance - Vehicles	0	1,370	1,370
	228003 Maintenance – Machinery, Equipment & Furniture	0	424	424
	Total	136,599	1,038,966	1,175,565
	<i>GoU Development</i>	<i>136,599</i>	<i>1,038,966</i>	<i>1,175,565</i>
	<i>External Financing</i>	<i>0</i>	<i>1,038,966</i>	<i>1,038,966</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

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Budget Output: 04 Agricultural research capacity strengthened

4 research institutes research infrastructure maintained	Item	Balance b/f	New Funds	Total
One institute laboratory supported for accreditation	211103 Allowances (Inc. Casuals, Temporary)	14,133	16,676	30,808
4 laboratory equipment maintained/serviced	221001 Advertising and Public Relations	0	406	406
NARO wide training plan 2021_22 developed	221003 Staff Training	165,464	74,481	239,945
	221004 Recruitment Expenses	5,365	0	5,365
	221006 Commissions and related charges	0	339	339
	221007 Books, Periodicals & Newspapers	2,600	2,600	5,200
	221008 Computer supplies and Information Technology (IT)	400,403	479,240	879,643
	221009 Welfare and Entertainment	15,514	20,191	35,705
	221011 Printing, Stationery, Photocopying and Binding	0	29,014	29,014
	221012 Small Office Equipment	0	1,149	1,149
	221016 IFMS Recurrent costs	20,050	0	20,050
	221017 Subscriptions	11	2,742	2,753
	222003 Information and communications technology (ICT)	0	17,749	17,749
	223002 Rates	50,000	0	50,000
	223005 Electricity	0	716	716
	223006 Water	0	4,052	4,052
	224004 Cleaning and Sanitation	0	244	244
	225001 Consultancy Services- Short term	117,072	76,219	193,291
	226002 Licenses	97	69,367	69,464
	227001 Travel inland	296	103,530	103,827
	227004 Fuel, Lubricants and Oils	36,962	16,408	53,369
	228001 Maintenance - Civil	0	17,451	17,451
	228002 Maintenance - Vehicles	0	9,647	9,647
	228003 Maintenance – Machinery, Equipment & Furniture	0	4,241	4,241
	228004 Maintenance – Other	0	1,626	1,626
	Total	827,965	948,087	1,776,053
	GoU Development	827,965	948,087	1,776,053
	External Financing	0	948,087	948,087
	AIA	0	0	0

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Outputs Funded

Budget Output: 51 Payments to International Organisations (CGIAR, ASARECA, WARDA)

Quarterly Compliance to 6 international organizations (CGIAR, ASEREC, FARA, CABI WADRA and BeCA) and autonomous institutions strengthened.	Item	Balance b/f	New Funds	Total
	262201 Contributions to International Organisations (Capital)	18,007	889,000	907,007
	264101 Contributions to Autonomous Institutions	11,000	33,000	44,000
	Total	29,007	922,000	951,007
	GoU Development	29,007	922,000	951,007
	External Financing	0	922,000	922,000
	AIA	0	0	0

Capital Purchases

Budget Output: 72 Government Buildings and Administrative Infrastructure

Five Agricultural research facilities across four public research Institutes of NaCCORI multipurpose cocoa and coffee research laboratory, NARL, NaLIRRI multipurpose vaccine research and Production laboratory and Rwebitaba tea research laboratory completed for efficient delivery of research services to accelerate Agro Industrialization.	Item	Balance b/f	New Funds	Total
	281504 Monitoring, Supervision & Appraisal of Capital work	248,896	358,605	607,501
	312101 Non-Residential Buildings	1,285,823	6,771,901	8,057,725
	312102 Residential Buildings	122,905	165,420	288,324
	312104 Other Structures	63,581	769,133	832,714
	Total	1,721,204	8,065,059	9,786,264
	GoU Development	1,721,204	8,065,059	9,786,264
	External Financing	0	8,065,059	8,065,059
	AIA	0	0	0

Budget Output: 76 Purchase of Office and ICT Equipment, including Software

Two Agricultural intelligence tool acquired to support research decision making. One Agricultural Research Big data center developed to support data collection management and disseminations. Four digital research platforms developed Three NARO knowledge products developed for technology dissemination One value chain, digital online plat form developed	Item	Balance b/f	New Funds	Total
	312213 ICT Equipment	0	30,000	30,000
	Total	0	30,000	30,000
	GoU Development	0	30,000	30,000
	External Financing	0	30,000	30,000
	AIA	0	0	0

Budget Output: 77 Purchase of Specialised Machinery & Equipment

One Incubation facility equipment acquired and installed at Mukono ZARDI to support incubation of technologies for industrial stimulation.	Item	Balance b/f	New Funds	Total
	312202 Machinery and Equipment	379,770	428,684	808,454
	312214 Laboratory Equipments	100,000	0	100,000
	Total	479,770	428,684	908,454
	GoU Development	479,770	428,684	908,454
	External Financing	0	428,684	428,684
	AIA	0	0	0

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Budget Output: 78 Purchase of Office and Residential Furniture and Fittings

Continued to furnish agriculture research facilities at NaLIRRI and Rwebitaba, NAFORRI, NACORI and others.	Item	Balance b/f	New Funds	Total
	312203 Furniture & Fixtures	113,995	5,000	118,995
	Total	113,995	5,000	118,995
	<i>GoU Development</i>	<i>113,995</i>	<i>5,000</i>	<i>118,995</i>
	<i>External Financing</i>	<i>0</i>	<i>5,000</i>	<i>5,000</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>
	GRAND TOTAL	5,593,778	31,129,453	36,723,231
	<i>Wage Recurrent</i>	<i>0</i>	<i>8,558,307</i>	<i>8,558,307</i>
	<i>Non Wage Recurrent</i>	<i>1,300,522</i>	<i>6,077,793</i>	<i>7,378,315</i>
	<i>GoU Development</i>	<i>4,293,256</i>	<i>16,493,353</i>	<i>20,786,609</i>
	<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>