

VOTE: 142 National Agricultural Research Organization (NARO)

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V1: Summary of Issues in Budget Execution

Table V1.1: Overview of Vote Expenditures (US\$ Billion)

| | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % Budget Released | % Budget Spent | % Releases Spent | |
|-------------------------------------|-----------------|----------------|--------------------|-----------------|-------------------|----------------|------------------|---------|
| Recurrent | Wage | 38.811 | 39.811 | 29.858 | 29.853 | 77.0 % | 77.0 % | 100.0 % |
| | Non-Wage | 29.397 | 29.397 | 26.473 | 18.741 | 90.0 % | 63.8 % | 70.8 % |
| Dev. | GoU | 48.575 | 48.575 | 41.769 | 31.788 | 86.0 % | 65.4 % | 76.1 % |
| | Ext Fin. | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 % | 0.0 % | 0.0 % |
| GoU Total | | 116.783 | 117.783 | 98.100 | 80.382 | 84.0 % | 68.8 % | 81.9 % |
| Total GoU+Ext Fin (MTEF) | | 116.783 | 117.783 | 98.100 | 80.382 | 84.0 % | 68.8 % | 81.9 % |
| Arrears | | 0.144 | 0.144 | 0.144 | 0.144 | 100.0 % | 100.2 % | 100.0 % |
| Total Budget | | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |
| A.I.A Total | | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 % | 0.0 % | 0.0 % |
| Grand Total | | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |
| Total Vote Budget Excluding Arrears | | 116.783 | 117.783 | 98.100 | 80.382 | 84.0 % | 68.8 % | 81.9 % |

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

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % Budget Released | % Budget Spent | %Releases Spent |
|---|-----------------|----------------|--------------------|-----------------|-------------------|----------------|-----------------|
| Programme:01 Agro-Industrialization | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0% |
| Sub SubProgramme:01 Agricultural Research | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0% |
| Total for the Vote | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |

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

(i) Major unspent balances

Departments , Projects

Sub SubProgramme:01 Agricultural Research

Sub Programme: 01 Institutional Strengthening and Coordination

| | | |
|---|---------------|------------------------------------|
| 6.009 | Bn Shs | Department : 007 NARO-SECRETARIATE |
| Reason: The unspent balances under NARO were a result of a number of factors ranging from; delayed submission of invoices and certificates from contractors, delayed implementation of research studies due to a number of factors. The maintenance of the access road National Crop research Institute to National Livestock research Institute planned stage of completion was not updated by the end of the quarter, thus there demand was not submitted The excess rain during the quarter disrupted the planned agricultural activities. The invoices for some agricultural inputs supplied had not been received by NARO by the end of the quarter | | |

Items

| | | |
|--|-------------|--|
| 0.970 | UShs | 212101 Social Security Contributions |
| Reason: There was a delay in verification and processing of NSSF for the enhanced staff salaries accompanied with IFMIS system challenges. | | |
| 0.338 | UShs | 212103 Incapacity benefits (Employees) |
| Reason: There were delays in submission of claims from beneficiaries | | |
| 0.191 | UShs | 212102 Medical expenses (Employees) |
| Reason: There was a delay in submission of invoices from the service providers | | |

Sub Programme: 02 Agricultural Production and Productivity

| | | |
|--|---------------|---|
| | Bn Shs | Department : 002 Buginyaya Zonal Agriculture Research Institute(ZARDI) |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| Items | | |
| 0.009 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| | Bn Shs | Department : 004 Kachwekano Zonal Agriculture Research Institute(ZARDI) |
| Reason: There were issues regarding registration with NITA U requirements for the telecommunication services | | |

Items

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(i) Major unspent balances

Departments , Projects

Sub SubProgramme:01 Agricultural Research

Sub Programme: 02 Agricultural Production and Productivity

| | | |
|---|---------------|------------------------------------|
| 6.009 | Bn Shs | Department : 007 NARO-SECRETARIATE |
| Reason: The unspent balances under NARO were a result of a number of factors ranging from; delayed submission of invoices and certificates from contractors, delayed implementation of research studies due to a number of factors. The maintenance of the access road National Crop research Institute to National Livestock research Institute planned stage of completion was not updated by the end of the quarter, thus there demand was not submitted The excess rain during the quarter disrupted the planned agricultural activities. The invoices for some agricultural inputs supplied had not been received by NARO by the end of the quarter | | |

Items

| | | |
|--|---------------|--|
| 4.580 | UShs | 228001 Maintenance-Buildings and Structures |
| Reason: There were delayed submission of invoices from contractors arising from interferences by the rains | | |
| 1.026 | UShs | 224011 Research Expenses |
| Reason: Delayed commencement of 34 CGS projects which led to poor absorption. A delay to start research activities in previous quarter one and two which led delay implementing follow-on quarter three. | | |
| | Bn Shs | Department : 008 National Agricultural Research Laboratories |
| Reason: There were technical requirements regarding registration with NITA-U. | | |

Items

| | | |
|--|---------------|--|
| 0.002 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| | Bn Shs | Department : 010 National Crops Resources Research Institute |
| Reason: There were issues regarding registration with NITA U requirements for the telecommunication services | | |

Items

| | | |
|---|---------------|--|
| 0.001 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| | Bn Shs | Department : 011 National Fisheries Resources Research Institute |
| Reason: There were technical requirements regarding registration with NITA-U. | | |

Items

| | | |
|--------------|-------------|---|
| 0.003 | UShs | 222001 Information and Communication Technology Services. |
|--------------|-------------|---|

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(i) Major unspent balances

Departments , Projects

Sub SubProgramme:01 Agricultural Research

Sub Programme: 02 Agricultural Production and Productivity

| | |
|---|--|
| Bn Shs | Department : 011 National Fisheries Resources Research Institute |
| Reason: There were technical requirements regarding registration with NITA-U. | |

Items

| | |
|---|---|
| Reason: There were technical requirements regarding registration with NITA-U. | |
| Bn Shs | Department : 012 National Forestry Resources Research Institute |
| Reason: There were technical requirements regarding registration with NITA-U. | |

Items

| | | |
|---|--------|--|
| 0.003 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| | Bn Shs | Department : 013 Mukono Zonal Agriculture Research Institute (ZARDI) |
| Reason: There were technical requirements regarding registration with NITA-U. | | |

Items

| | | |
|---|--------|--|
| 0.004 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| | Bn Shs | Department : 015 National Semi Arid Resources Research Institute (NaSARRI) |
| Reason: There were technical requirements regarding registration with NITA-U. | | |

Items

| | | |
|---|--------|---|
| 0.001 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |
| | Bn Shs | Department : 017 Rwebitaba ZARDI |
| Reason: There were technical requirements regarding registration with NITA-U. | | |

Items

| | | |
|---|------|---|
| 0.002 | UShs | 222001 Information and Communication Technology Services. |
| Reason: There were technical requirements regarding registration with NITA-U. | | |

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(i) Major unspent balances

Departments , Projects

Sub SubProgramme:01 Agricultural Research

Sub Programme: 02 Agricultural Production and Productivity

| | | |
|--------------|--------|--|
| 0.510 | Bn Shs | Project : 1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) |
| | | Reason: The invoices for some works completed had not been received by NARO by the end of the quarter to enable the payment process |
| | | The invoices for some agricultural Electrical machinery procured and delivered had not been received by NARO by the end of the quarter |

Items

| | | |
|--------------|--------|--|
| 0.472 | UShs | 312121 Non-Residential Buildings - Acquisition |
| | | Reason: The invoices for some works completed had not been received by NARO by the end of the quarter to enable the payment process |
| 0.020 | UShs | 312232 Electrical machinery - Acquisition |
| | | Reason: The invoices for some agricultural Electrical machinery procured and delivered had not been received by NARO by the end of the quarter |
| 0.018 | UShs | 312139 Other Structures - Acquisition |
| | | Reason: The invoices for some works completed had not been received by NARO by the end of the quarter to enable the payment process |
| 9.439 | Bn Shs | Project : 1619 Retooling of National Agricultural Research Organization |
| | | Reason: There were some Variations in the contract which delayed delivering the vehicles and thus the payment by the end of the quarter |
| | | The invoices were not received early enough during the quarter to complete the payment process |
| | | Some meetings were postponed to Quarter 4 following some other unexpected agricultural activities emerging during the quarter. |
| | | The invoices were not received early enough during the quarter to complete the payment process |

Items

| | | |
|--------------|------|---|
| 5.981 | UShs | 312212 Light Vehicles - Acquisition |
| | | Reason: There were some Variations in the contract which delayed delivering the vehicles and thus the payment by the end of the quarter |
| 0.400 | UShs | 312229 Other ICT Equipment - Acquisition |
| | | Reason: The invoices were not received early enough during the quarter to complete the payment process |
| 0.332 | UShs | 211107 Boards, Committees and Council Allowances |

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(i) Major unspent balances

Departments , Projects

Sub SubProgramme:01 Agricultural Research

Sub Programme: 02 Agricultural Production and Productivity

| | | |
|-------|--------|---|
| 9.439 | Bn Shs | Project : 1619 Retooling of National Agricultural Research Organization |
|-------|--------|---|

Reason: There were some Variations in the contract which delayed delivering the vehicles and thus the payment by the end of the quarter

The invoices were not received early enough during the quarter to complete the payment process

Some meetings were postponed to Quarter 4 following some other unexpected agricultural activities emerging during the quarter.

The invoices were not received early enough during the quarter to complete the payment process

Items

Reason: Some meetings were postponed to Quarter 4 following some other unexpected agricultural activities emerging during the quarter.

| | | |
|-------|------|---|
| 0.296 | UShs | 228001 Maintenance-Buildings and Structures |
|-------|------|---|

Reason: The invoices were not received early enough during the quarter to complete the payment process

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V2: Performance Highlights

Table V2.1: PIAP outputs and output Indicators

| | | | |
|---|-------------------|-----------------|--------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:01 Institutional Strengthening and Coordination | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:007 NARO-SECRETARIATE | | | |
| Budget Output: 000001 Audit and Risk Management | | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of improved cotton varieties developed | Number | 6 | 0 |
| Budget Output: 000014 Administrative and Support Services | | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 14 | 5 |
| Number of improved technologies and innovations adopted | Number | 20 | 2 |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:001 Abi Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 4 | 2 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 4 | 2 |

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

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

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| | | | |
|--|-------------------|-----------------|--------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 1 | 0 |
| Number of improved technologies and innovations adopted | Number | 9 | 4 |
| Number of research products and services for food and nutrition security generated | Number | 5 | 3 |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of District Adaptive Research Support Teams (DARSTs) developed | Number | 2 | 1 |
| Number of technologies adopted | Number | 9 | 5 |
| Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 2 | 2 |
| Number of improved technologies and innovations adopted | Number | 7 | 4 |
| Number of research products and services suitable for industry developed | Number | 1 | 1 |
| Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 5 | 3 |
| Number of improved technologies and innovations adopted | Number | 7 | 4 |

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| | | | |
|---|--------------------------|------------------------|---------------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of markets created along product lines | Number | 2 | 1 |
| Number of research products and services for food and nutrition security generated | Number | 4 | 2 |
| Number of research products and services suitable for industry developed | Number | 2 | 1 |
| Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output: 010011 Technology Promotion | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 6 | 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 3 | 1 |
| Number of improved technologies and innovations adopted | Number | 14 | 3 |
| Number of markets created along product lines | Number | 3 | 1 |
| Number of research products and services for food and nutrition security generated | Number | 3 | 1 |
| Department:007 NARO-SECRETARIATE | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 14 | 7 |
| Number of research products and services for food and nutrition security generated | Number | 15 | 8 |

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| | | | |
|---|-------------------|-----------------|--------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:008 National Agricultural Research Laboratories | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 4 | 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 4 | 4 |
| Number of improved technologies and innovations adopted | Number | 4 | 2 |
| Number of research products and services for food and nutrition security generated | Number | 6 | 3 |
| Number of research products and services suitable for industry developed | Number | 8 | 4 |
| Department:009 National Coffee Research Institute | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 6 | 3 |
| Number of improved technologies and innovations adopted | Number | 3 | 2 |
| Number of market responsive coffee varieties developed | Number | 3 | 2 |
| Number of research products and services for food and nutrition security generated | Number | 3 | 1 |
| Number of research products and services suitable for industry developed | Number | 6 | 1 |
| Department:010 National Crops Resources Research Institute | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 10 | 6 |

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| | | | |
|---|-------------------|-----------------|--------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:010 National Crops Resources Research Institute | | | |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 12 | 6 |
| Number of improved technologies and innovations adopted | Number | 19 | 10 |
| Number of markets created along product lines | Number | 3 | 0 |
| Number of research products and services for food and nutrition security generated | Number | 12 | 6 |
| Number of research products and services suitable for industry developed | Number | 5 | 3 |
| Budget Output: 010011 Technology Promotion | | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of technologies adopted | Number | 5 | 5 |
| Department:011 National Fisheries Resources Research Institute | | | |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 5 | 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 3 | 2 |
| Number of improved technologies and innovations adopted | Number | 3 | 2 |
| Number of markets created along product lines | Number | 2 | 1 |
| Number of research products and services for food and nutrition security generated | Number | 3 | 1 |

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

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| | | | |
|--|-------------------|-----------------|--------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Department:017 Rwebitaba ZARDI | | | |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 4 | 2 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 18 | 9 |
| Number of improved technologies and innovations adopted | Number | 6 | 3 |
| Number of markets created along product lines | Number | 4 | 2 |
| Number of research products and services for food and nutrition security generated | Number | 4 | 2 |
| Number of research products and services suitable for industry developed | Number | 4 | 2 |
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | | |
| Budget Output: 000017 Infrastructure Development and Management | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of research products and services suitable for industry developed | Number | 13 | 3 |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of research products and services suitable for industry developed | Number | 13 | 3 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| | | | |
|---|-------------------|-----------------|--------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Project:1619 Retooling of National Agricultural Research Organization | | | |
| Budget Output: 000003 Facilities and Equipment Management | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of research products and services for food and nutrition security generated | Number | 10 | 5 |
| Budget Output: 010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of market-oriented products generated | Number | 6 | 2 |
| Budget Output: 010009 Research Partnerships | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of functional public-private partnerships established for technology development and promotion | Number | 12 | 6 |
| Budget Output: 010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of research products and services suitable for industry developed | Number | 10 | 5 |
| Budget Output: 010011 Technology Promotion | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| PIAP Output Indicators | Indicator Measure | Planned 2022/23 | Actuals By END Q 3 |
| Number of improved technologies and innovations adopted | Number | 36 | 15 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

Performance highlights for the Quarter

During the quarter 3, NARO registered a number of achievements against set targets in bid to generate products for food, nutrition and industry to support Ugandan product resilience in the destination markets. Such achievements include, but are not limited to the achievements below: NARO validated, updated and digitized the Masaka soil Sheet from a scale of 1: 250,000 to 1: 50,000. The major soil types and their spatial coverage were identified and documented. 66 soil types identified as compared to 10 soil types under the old scale . There are severe limitations that reduce the choice of plants or require special conservation practices, or both for 64.1% of the soils under Masaka soil sheet. Kampala soil sheet has been digitized, gap filling at the same scale (80%). Kabale and Mbarara digitization completed pending gap filling.

The anti-tick vaccine trials started in September 2022. The following preliminary results have been observed. No adverse signs associated with the vaccine have been recorded indicating that, so far, the vaccine is safe to the animals. Average tick population per animal has reduced by 99.9%

NARO distributed 2,000 traps to farmers in the fight against Black Coffee Twig Borer (BCTB). This trap can catch upto 50 beetles (both BCTB and Coffee Berry Borer, CBB) in two weeks (the time for changing the ethanol
In line with NPD3 PIAP output indicators, the cumulative performance at quarter 3 indicated 75 products for market and industry, 34 competitive Grant scheme (CGS) research studies conducted, 27 technological innovation platforms, 23 technologies delivered to uptake pathways; 78 agricultural research publications, 1 Gender and equity responsive research studies and 3 infrastructure established. Under food and feeds security intervention, NARO produced about 712MT of assorted seed to be delivered to along stakeholder value chains.
In accordance with NAR Act 2005, the new NARO Governing Council was inaugurated.

Variances and Challenges

NARO was instructed to implement the food and feed security intervention from the existing budget in a hope of receiving a supplementary of UGX 15bn. The implementation of the food and feed intervention has hindered implementation of the planned and approved workplan and budget under the appropriation instrument hence a risk of not achieving the set targeted outputs.

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

V3: Details of Releases and Expenditure

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

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % GoU Budget Released | % GoU Budget Spent | % GoU Releases Spent |
|--|-----------------|----------------|--------------------|-----------------|-----------------------|--------------------|----------------------|
| Programme:01 Agro-Industrialization | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |
| Sub SubProgramme:01 Agricultural Research | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |
| 000001 Audit and Risk Management | 0.121 | 0.121 | 0.121 | 0.089 | 100.0 % | 73.5 % | 73.5 % |
| 000003 Facilities and Equipment Management | 17.270 | 17.270 | 16.341 | 9.527 | 94.6 % | 55.2 % | 58.3 % |
| 000014 Administrative and Support Services | 54.546 | 55.546 | 42.941 | 41.270 | 78.7 % | 75.7 % | 96.1 % |
| 000017 Infrastructure Development and Management | 5.719 | 5.719 | 0.916 | 0.406 | 16.0 % | 7.1 % | 44.3 % |
| 010008 Capacity Strengthening | 20.433 | 20.433 | 20.163 | 12.481 | 98.7 % | 61.1 % | 61.9 % |
| 010009 Research Partnerships | 1.800 | 1.800 | 1.020 | 1.020 | 56.7 % | 56.7 % | 100.0 % |
| 010010 Technology Generation | 11.698 | 11.698 | 11.400 | 10.996 | 97.5 % | 94.0 % | 96.5 % |
| 010011 Technology Promotion | 5.341 | 5.341 | 5.341 | 4.738 | 100.0 % | 88.7 % | 88.7 % |
| Total for the Vote | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % GoU Budget Released | % GoU Budget Spent | % GoU Releases Spent |
|--|-----------------|----------------|--------------------|-----------------|-----------------------|--------------------|----------------------|
| 211102 Contract Staff Salaries | 38.811 | 39.811 | 29.858 | 29.853 | 76.9 % | 76.9 % | 100.0 % |
| 211104 Employee Gratuity | 9.703 | 9.703 | 7.277 | 7.277 | 75.0 % | 75.0 % | 100.0 % |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 1.978 | 1.978 | 1.836 | 1.550 | 92.8 % | 78.4 % | 84.4 % |
| 211107 Boards, Committees and Council Allowances | 0.762 | 0.762 | 0.762 | 0.415 | 100.0 % | 54.5 % | 54.5 % |
| 212101 Social Security Contributions | 3.881 | 3.881 | 3.881 | 2.911 | 100.0 % | 75.0 % | 75.0 % |
| 212102 Medical expenses (Employees) | 0.850 | 0.850 | 0.850 | 0.659 | 100.0 % | 77.5 % | 77.5 % |
| 212103 Incapacity benefits (Employees) | 0.635 | 0.635 | 0.531 | 0.192 | 83.5 % | 30.3 % | 36.3 % |
| 221001 Advertising and Public Relations | 0.411 | 0.411 | 0.411 | 0.283 | 100.0 % | 68.9 % | 68.9 % |
| 221003 Staff Training | 1.009 | 1.009 | 1.002 | 0.890 | 99.3 % | 88.2 % | 88.9 % |
| 221004 Recruitment Expenses | 0.060 | 0.060 | 0.060 | 0.038 | 100.0 % | 63.6 % | 63.6 % |
| 221007 Books, Periodicals & Newspapers | 0.048 | 0.048 | 0.048 | 0.036 | 100.0 % | 75.1 % | 75.1 % |
| 221008 Information and Communication Technology Supplies. | 0.357 | 0.357 | 0.327 | 0.298 | 91.6 % | 83.5 % | 91.2 % |
| 221009 Welfare and Entertainment | 0.407 | 0.407 | 0.407 | 0.270 | 100.0 % | 66.5 % | 66.5 % |
| 221011 Printing, Stationery, Photocopying and Binding | 0.539 | 0.539 | 0.529 | 0.333 | 98.1 % | 61.8 % | 63.0 % |
| 221012 Small Office Equipment | 0.050 | 0.050 | 0.050 | 0.046 | 100.0 % | 92.3 % | 92.3 % |
| 221016 Systems Recurrent costs | 0.030 | 0.030 | 0.030 | 0.011 | 100.0 % | 35.5 % | 35.5 % |
| 221017 Membership dues and Subscription fees. | 0.066 | 0.066 | 0.066 | 0.056 | 100.0 % | 84.7 % | 84.7 % |
| 222001 Information and Communication Technology Services. | 0.415 | 0.415 | 0.375 | 0.249 | 90.3 % | 60.0 % | 66.4 % |
| 222002 Postage and Courier | 0.040 | 0.040 | 0.040 | 0.037 | 100.0 % | 92.1 % | 92.1 % |
| 223001 Property Management Expenses | 0.142 | 0.142 | 0.142 | 0.128 | 100.0 % | 90.1 % | 90.1 % |
| 223002 Property Rates | 0.034 | 0.034 | 0.034 | 0.004 | 100.0 % | 13.0 % | 13.0 % |
| 223004 Guard and Security services | 0.299 | 0.299 | 0.295 | 0.256 | 98.7 % | 85.5 % | 86.7 % |
| 223005 Electricity | 0.277 | 0.277 | 0.262 | 0.249 | 94.6 % | 89.8 % | 95.0 % |
| 223006 Water | 0.090 | 0.090 | 0.090 | 0.084 | 100.0 % | 93.1 % | 93.1 % |
| 224001 Medical Supplies and Services | 0.040 | 0.040 | 0.040 | 0.040 | 100.0 % | 100.0 % | 100.0 % |
| 224002 Veterinary supplies and services | 0.162 | 0.162 | 0.162 | 0.151 | 100.0 % | 93.2 % | 93.2 % |
| 224003 Agricultural Supplies and Services | 3.532 | 3.532 | 3.532 | 3.295 | 100.0 % | 93.3 % | 93.3 % |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % GoU Budget Released | % GoU Budget Spent | % GoU Releases Spent |
|---|-----------------|----------------|--------------------|-----------------|-----------------------|--------------------|----------------------|
| 224004 Beddings, Clothing, Footwear and related Services | 0.081 | 0.081 | 0.076 | 0.061 | 93.8 % | 75.1 % | 80.0 % |
| 224005 Laboratory supplies and services | 1.763 | 1.763 | 1.726 | 1.558 | 97.9 % | 88.4 % | 90.3 % |
| 224010 Protective Gear | 0.018 | 0.018 | 0.018 | 0.016 | 100.0 % | 88.5 % | 88.5 % |
| 224011 Research Expenses | 14.827 | 14.827 | 14.705 | 13.376 | 99.2 % | 90.2 % | 91.0 % |
| 225101 Consultancy Services | 0.509 | 0.509 | 0.509 | 0.425 | 100.0 % | 83.4 % | 83.4 % |
| 225201 Consultancy Services-Capital | 0.120 | 0.120 | 0.000 | 0.000 | 0.0 % | 0.0 % | 0.0 % |
| 225202 Environment Impact Assessment for Capital Works | 0.100 | 0.100 | 0.100 | 0.030 | 100.0 % | 30.0 % | 30.0 % |
| 225204 Monitoring and Supervision of capital work | 0.466 | 0.466 | 0.466 | 0.440 | 100.0 % | 94.3 % | 94.3 % |
| 226001 Insurances | 0.077 | 0.077 | 0.077 | 0.053 | 100.0 % | 69.4 % | 69.4 % |
| 226002 Licenses | 0.098 | 0.098 | 0.098 | 0.041 | 100.0 % | 42.4 % | 42.4 % |
| 227001 Travel inland | 0.747 | 0.747 | 0.747 | 0.460 | 100.0 % | 61.6 % | 61.6 % |
| 227003 Carriage, Haulage, Freight and transport hire | 0.019 | 0.019 | 0.015 | 0.015 | 78.9 % | 78.9 % | 100.0 % |
| 227004 Fuel, Lubricants and Oils | 1.244 | 1.244 | 1.208 | 1.114 | 97.1 % | 89.6 % | 92.2 % |
| 228001 Maintenance-Buildings and Structures | 6.319 | 6.319 | 6.194 | 1.318 | 98.0 % | 20.9 % | 21.3 % |
| 228002 Maintenance-Transport Equipment | 0.581 | 0.581 | 0.534 | 0.508 | 91.9 % | 87.4 % | 95.1 % |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 0.374 | 0.374 | 0.311 | 0.292 | 83.2 % | 78.0 % | 93.8 % |
| 228004 Maintenance-Other Fixed Assets | 0.125 | 0.125 | 0.125 | 0.094 | 100.0 % | 75.0 % | 75.0 % |
| 262201 Contributions to International Organisations-Capital | 1.785 | 1.785 | 1.020 | 1.020 | 57.1 % | 57.1 % | 100.0 % |
| 273102 Incapacity, death benefits and funeral expenses | 0.017 | 0.017 | 0.015 | 0.015 | 88.1 % | 88.1 % | 100.0 % |
| 282201 Contributions to Non-Government Institutions | 0.015 | 0.015 | 0.000 | 0.000 | 0.0 % | 0.0 % | 0.0 % |
| 312121 Non-Residential Buildings - Acquisition | 4.712 | 4.712 | 0.878 | 0.406 | 18.6 % | 8.6 % | 46.2 % |
| 312139 Other Structures - Acquisition | 0.862 | 0.862 | 0.018 | 0.000 | 2.1 % | 0.0 % | 0.0 % |
| 312212 Light Vehicles - Acquisition | 5.981 | 5.981 | 5.981 | 0.000 | 100.0 % | 0.0 % | 0.0 % |
| 312221 Light ICT hardware - Acquisition | 0.150 | 0.150 | 0.150 | 0.000 | 100.0 % | 0.0 % | 0.0 % |
| 312222 Heavy ICT hardware - Acquisition | 0.164 | 0.164 | 0.164 | 0.075 | 100.0 % | 46.1 % | 46.1 % |
| 312229 Other ICT Equipment - Acquisition | 0.400 | 0.400 | 0.400 | 0.000 | 100.0 % | 0.0 % | 0.0 % |
| 312232 Electrical machinery - Acquisition | 0.025 | 0.025 | 0.020 | 0.000 | 80.0 % | 0.0 % | 0.0 % |

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Quarter 3

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % GoU Budget Released | % GoU Budget Spent | % GoU Releases Spent |
|--|-----------------|----------------|--------------------|-----------------|-----------------------|--------------------|----------------------|
| 312233 Medical, Laboratory and Research & appliances - Acquisition | 10.555 | 10.555 | 9.627 | 9.432 | 91.2 % | 89.4 % | 98.0 % |
| 312235 Furniture and Fittings - Acquisition | 0.020 | 0.020 | 0.020 | 0.020 | 100.0 % | 99.1 % | 99.1 % |
| 352882 Utility Arrears Budgeting | 0.144 | 0.144 | 0.144 | 0.144 | 100.0 % | 100.0 % | 100.0 % |
| Total for the Vote | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % GoU Budget Released | % GoU Budget Spent | % GoU Releases Spent |
|--|-----------------|----------------|--------------------|-----------------|-----------------------|--------------------|----------------------|
| Programme:01 Agro-Industrialization | 116.927 | 117.927 | 98.244 | 80.526 | 84.02 % | 68.87 % | 81.97 % |
| Sub SubProgramme:01 Agricultural Research | 116.927 | 117.927 | 98.244 | 80.526 | 84.02 % | 68.87 % | 82.0 % |
| Departments | | | | | | | |
| 001 Abi Zonal Agriculture Research Institute(ZARDI) | 0.117 | 0.117 | 0.117 | 0.117 | 100.0 % | 100.0 % | 100.0 % |
| 002 Buginyaya Zonal Agriculture Research Institute(ZARDI) | 0.272 | 0.272 | 0.272 | 0.263 | 100.0 % | 96.6 % | 96.6 % |
| 003 Bulindi Zonal Agriculture Research Institute(ZARDI) | 0.139 | 0.139 | 0.139 | 0.139 | 100.0 % | 100.0 % | 100.0 % |
| 004 Kachwekano Zonal Agriculture Research Institute(ZARDI) | 0.214 | 0.214 | 0.214 | 0.214 | 100.0 % | 99.9 % | 99.9 % |
| 005 Mbarara Zonal Agriculture Research Institute(ZARDI) | 0.117 | 0.117 | 0.117 | 0.117 | 100.0 % | 100.0 % | 100.0 % |
| 006 Nabuin Zonal Agriculture Research Institute(ZARDI) | 0.117 | 0.117 | 0.117 | 0.117 | 100.0 % | 100.0 % | 100.0 % |
| 007 NARO-SECRETARIATE | 64.993 | 65.993 | 53.119 | 45.406 | 81.7 % | 69.9 % | 85.5 % |
| 008 National Agricultural Research Laboratories | 0.300 | 0.300 | 0.300 | 0.298 | 100.0 % | 99.5 % | 99.5 % |
| 009 National Coffee Research Institute | 0.197 | 0.197 | 0.197 | 0.197 | 100.0 % | 100.0 % | 100.0 % |
| 010 National Crops Resources Research Institute | 0.247 | 0.247 | 0.247 | 0.246 | 100.0 % | 99.7 % | 99.7 % |
| 011 National Fisheries Resources Research Institute | 0.197 | 0.197 | 0.197 | 0.194 | 100.0 % | 98.3 % | 98.3 % |
| 012 National Forestry Resources Research Institute | 0.125 | 0.125 | 0.125 | 0.122 | 100.0 % | 97.8 % | 97.8 % |
| 013 Mukono Zonal Agriculture Research Institute (ZARDI) | 0.264 | 0.264 | 0.264 | 0.260 | 100.0 % | 98.6 % | 98.6 % |
| 014 National Livestock Resources Research Institute (NaLIRRI) | 0.622 | 0.622 | 0.622 | 0.622 | 100.0 % | 100.0 % | 100.0 % |
| 015 National Semi Arid Resources Research Institute (NaSARRI) | 0.122 | 0.122 | 0.122 | 0.122 | 100.0 % | 99.6 % | 99.6 % |
| 016 Ngetta ZARDI | 0.117 | 0.117 | 0.117 | 0.117 | 100.0 % | 100.0 % | 100.0 % |
| 017 Rwebitaba ZARDI | 0.192 | 0.192 | 0.190 | 0.187 | 98.9 % | 97.7 % | 98.8 % |
| Development Projects | | | | | | | |
| 1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | 7.719 | 7.719 | 2.621 | 2.110 | 33.9 % | 27.3 % | 80.5 % |

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Quarter 3

| <i>Billion Uganda Shillings</i> | Approved Budget | Revised Budget | Released by End Q3 | Spent by End Q3 | % GoU Budget Released | % GoU Budget Spent | % GoU Releases Spent |
|---|-----------------|----------------|--------------------|-----------------|-----------------------|--------------------|----------------------|
| Programme:01 Agro-Industrialization | 116.927 | 117.927 | 98.244 | 80.526 | 84.02 % | 68.87 % | 81.97 % |
| 1619 Retooling of National Agricultural Research Organization | 40.856 | 40.856 | 39.148 | 29.678 | 95.8 % | 72.6 % | 75.8 % |
| Total for the Vote | 116.927 | 117.927 | 98.244 | 80.526 | 84.0 % | 68.9 % | 82.0 % |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

Quarter 3: Outputs and Expenditure in the Quarter

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|---|------------------------------------|--------------------------------------|
| Programme:01 Agro-Industrialization | | | |
| SubProgramme:01 Institutional Strengthening and Coordination | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Departments | | | |
| Department:007 NARO-SECRETARIATE | | | |
| Budget Output:000001 Audit and Risk Management | | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 2 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research. | One draft report produced on performance review of Public relations function of NARO, and management actions on previous audit issues assessed. One draft report on legal services produced, and assessment made on contract management, land grabbing, asset management and how legal cases concluded at selected PARIs. One PARI consolidated report on NTR performance and management produced with management responses. 3 Audit Staff at PARIs backstopped at NaFORRI, NaCORI, NaFIRRI Two special reports produced and shared. The report on NAROSEC Finance Committee and Civil works. Risk Assessment meetings held jointly with PARIs Resident Auditors, DOR, PL at NaCORI and MUZARDI. Final draft Biological Assets register formulated and tested at NaLIRRI One report produced on special assignment undertaken to validate progress and actions taken by management on NARO Land at KaZARDI, NaRL, NaFIRRI and NaCRRI One PARI consolidated report on NTR performance and management produced with management responses | | NA |
| Expenditures incurred in the Quarter to deliver outputs | | | UShs Thousand |
| Item | | | Spent |
| 221003 Staff Training | | | 2,820.000 |
| 224011 Research Expenses | | | 30,959.525 |
| Total For Budget Output | | | 33,779.525 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|--|
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 33,779.525 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:000014 Administrative and Support Services | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Annual subscription for insurance of research vessels, machinery and equipment maintained. 1Public-Private Partnership established for technology development and transfer ,1 research support infrastructure establishment supported 8 Governing council sessions supported 4 research supervisory support missions conducted | a) office equipment maintained.(Desktop computers and printers) b) Initiated 2 Public-Private Partnerships established for technology generation and promotion. c) Governing council sessions supported. | The annual subscription for insurance of marine research vessels (3 research ships) not paid due to lack of funds. |
| Expenditures incurred in the Quarter to deliver outputs | | US\$hs Thousand |
| Item | | Spent |
| 211102 Contract Staff Salaries | | 9,950,777.318 |
| 211104 Employee Gratuity | | 2,425,694.330 |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | | 31,840.000 |
| 212101 Social Security Contributions | | 970,277.708 |
| 212102 Medical expenses (Employees) | | 10,752.000 |
| 212103 Incapacity benefits (Employees) | | 18,282.000 |
| 221009 Welfare and Entertainment | | 13,840.000 |
| | Total For Budget Output | 13,421,463.356 |
| | Wage Recurrent | 9,950,777.318 |
| | Non Wage Recurrent | 3,470,686.038 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 13,455,242.881 |
| | Wage Recurrent | 9,950,777.318 |
| | Non Wage Recurrent | 3,504,465.563 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|---|
| Development Projects | | |
| N/A | | |
| SubProgramme:02 Agricultural Production and Productivity | | |
| Sub SubProgramme:01 Agricultural Research | | |
| Departments | | |
| Department:001 Abi Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 3 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 14,000 seedligs of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado | Two hectares of two newly released cassava varieties (Mukumba & Ug 120/193)fields maintained both on station and Arua district Olupi parish. | NA |
| 1 highly nutritious composite products one cereal gene bank established | 1) Efficacy of multi-nutrient blocks for livestock feeds tested. 2) Information on nutrient composition of two candidate fish products profiled. | NA |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 highly nutritious composite products one cereal gene bank established | a) One fish branded nutritive product profiled. b) Assorted inputs for one cereal gene bank purchased. | No sufficient funds to initiate activities on food and feed products. |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 224011 Research Expenses | | 9,170.000 |
| | Total For Budget Output | 9,170.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 9,170.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010011 Technology Promotion | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|------------------------------------|--------------------------------------|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 1 selected commodity West Nile region | Fish multistakeholder Innovation Platforms Strengthened. Work still on-going. | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preferred dry land legume variety 1 newly released root crop variety promoted | One hectare of land prepared, planted and soil and water conservation structures constructed for hectare of improved citrus varieties . | | NA |
| Expenditures incurred in the Quarter to deliver outputs | | | UShs Thousand |
| Item | Spent | | |
| 221008 Information and Communication Technology Supplies. | 125.000 | | |
| 221011 Printing, Stationery, Photocopying and Binding | 3,392.500 | | |
| 222001 Information and Communication Technology Services. | 93.750 | | |
| 224003 Agricultural Supplies and Services | 5,000.000 | | |
| 224011 Research Expenses | 10,030.000 | | |
| 227004 Fuel, Lubricants and Oils | 1,358.750 | | |
| | Total For Budget Output | 20,000.000 | |
| | Wage Recurrent | 0.000 | |
| | Non Wage Recurrent | 20,000.000 | |
| | Arrears | 0.000 | |
| | AIA | 0.000 | |
| | Total For Department | 29,170.000 | |
| | Wage Recurrent | 0.000 | |
| | Non Wage Recurrent | 29,170.000 | |
| | Arrears | 0.000 | |
| | AIA | 0.000 | |
| Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output:010008 Capacity Strengthening | | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|--------------------------------------|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 partnership promoted for technology generation 1 research products commercialized 1 research platform established | 3 commodity based partnerships (Bushikan Intergrated Area Cooperative Enterprises Ltd, Bukhoko Dubaana, Buginyanya Upland Company Ltd and Ibero Uganda in Bududa, Namisidwa and Bulambuli districts respectively initiated along the commodity value chain (Arabica coffee). | NA |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | Spent | |
| 211107 Boards, Committees and Council Allowances | 1,435.000 | |
| 212103 Incapacity benefits (Employees) | 441.000 | |
| 221001 Advertising and Public Relations | 1,304.000 | |
| 221007 Books, Periodicals & Newspapers | 339.000 | |
| 221008 Information and Communication Technology Supplies. | 1,565.000 | |
| 221009 Welfare and Entertainment | 300.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 1,318.000 | |
| 221012 Small Office Equipment | 522.000 | |
| 223001 Property Management Expenses | 782.000 | |
| 223004 Guard and Security services | 3,261.000 | |
| 223005 Electricity | 1,044.000 | |
| 223006 Water | 783.000 | |
| 224011 Research Expenses | 4,566.000 | |
| 226001 Insurances | 130.000 | |
| 227004 Fuel, Lubricants and Oils | 1,305.000 | |
| 228001 Maintenance-Buildings and Structures | 652.000 | |
| 228002 Maintenance-Transport Equipment | 5,300.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 1,305.000 | |
| 228004 Maintenance-Other Fixed Assets | 652.000 | |
| Total For Budget Output | | 27,004.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 27,004.000 |
| Arrears | | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|----------------------------|------------------------------------|--------------------------------------|
| | AIA | 0.000 |

Budget Output:010010 Technology Generation

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | | |
|--|--|---------------------|
| 1 Industrial products for yield improvement and commercialization developed for industry | Intent to release highland maize varieties with adequate resistance to major pests and diseases submitted to NAROSEC for discussion and possible consideration | NA |
| 1 package for sustainable disease management in Arabica coffee and potato developed | The treatments with different fungicides for management of CLR and CBD were imposed and the trial is being monitored with different data points being collected, | Work still on going |

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | | |
|---|---|----|
| 1 pests resistant varieties 2 disease management packages for strategic crops Generate 5 tons of potato seed 5 adaptive trials, demos 1Industrial products for yield improvement 1 scientific paper published | 2.5 acres of land have been prepared for multiplication of foundation seed of potato. | NA |
|---|---|----|

| | |
|---|---------------|
| Expenditures incurred in the Quarter to deliver outputs | UShs Thousand |
|---|---------------|

| Item | Spent |
|---|------------|
| 221011 Printing, Stationery, Photocopying and Binding | 775.250 |
| 221012 Small Office Equipment | 267.500 |
| 224002 Veterinary supplies and services | 250.000 |
| 224003 Agricultural Supplies and Services | 7,350.000 |
| 224011 Research Expenses | 2,300.000 |
| 227004 Fuel, Lubricants and Oils | 900.000 |
| 228002 Maintenance-Transport Equipment | 300.000 |
| Total For Budget Output | 12,142.750 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 12,142.750 |
| Arrears | 0.000 |
| AIA | 0.000 |

Budget Output:010011 Technology Promotion

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|--------------------------------------|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NA | - 2.7 t of foundation seed of potato harvested from the field .Produced for uptake by commercial seed producers. - 2.5 acres of land have been prepared for multiplication of foundation seed of potato | NA |
| NA | Two papers submitted and accepted for publication, presented eight papers at the recent NARO-MAK Conference | - |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | Two papers submitted and accepted for publication, presented eight papers at the recent NARO-MAK Conference | - |
| 3 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies | 10 demonstration plots on new candidate maize varieties established in Bukwo, Kapchorwa, Kween and Bulambuli and just at germination stage | NA |
| PIAP Output: 0103020112 Agricultural Research platforms established | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | 10 demonstration plots on new candidate maize varieties established in Bukwo, Kapchorwa, Kween and Bulambuli and just at germination stage | NA |
| Expenditures incurred in the Quarter to deliver outputs | | <i>US\$ Thousand</i> |
| Item | Spent | |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 2,174.000 | |
| 211107 Boards, Committees and Council Allowances | 957.000 | |
| 212103 Incapacity benefits (Employees) | 348.000 | |
| 221001 Advertising and Public Relations | 870.000 | |
| 221007 Books, Periodicals & Newspapers | 226.000 | |
| 221008 Information and Communication Technology Supplies. | 1,044.000 | |
| 221009 Welfare and Entertainment | 200.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 1,355.000 | |
| 221012 Small Office Equipment | 348.000 | |
| 223001 Property Management Expenses | 521.000 | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|--|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| 223004 Guard and Security services | | 2,173.000 |
| 223005 Electricity | | 696.000 |
| 223006 Water | | 521.000 |
| 224002 Veterinary supplies and services | | 698.250 |
| 224003 Agricultural Supplies and Services | | 1,413.000 |
| 224011 Research Expenses | | 3,685.000 |
| 226001 Insurances | | 87.000 |
| 227004 Fuel, Lubricants and Oils | | 870.000 |
| 228001 Maintenance-Buildings and Structures | | 435.000 |
| 228002 Maintenance-Transport Equipment | | 3,479.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 870.000 |
| 228004 Maintenance-Other Fixed Assets | | 434.000 |
| | Total For Budget Output | 23,404.250 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 23,404.250 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 62,551.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 62,551.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 MSIPs (Soybean and Rice) Initiated to promote technologies 1 crop, 1 livestock and 1 post-harvest handling technologies & practices promoted 1 Climate smart agricultural technologies demonstrated | One partnership MOU with SYOVA Ltd seed company in place, and BUZARDI is hosting their seed and vegetable demos | Work still ongoing with limited funds. |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|---|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NA | Procurement of materials and items for Q3 activities finalised <ul style="list-style-type: none">• Establishment of Half an Acre of Hass Avoado mother garden on-station for nutrient management is already done,• Vegetable production (Tomatoes and cabbages) under different training conditions is running• Evaluating 4 elite Rice varieites (NAMCHE5, SUPA, NERICA4 & NERICA10) for water use effciience under different water retention technologies trial is ongoing.(0.5 Acres)• Banana-Coffee agroforestry system established on-station and on-farm. | NA |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed | 4000 sq m of maize (Longe 10H and Bazooka), 570 sq m of sorghum (NAROSORG4), 380 sq m of millet (NAROMIL2), 76sq m Nakatti, 114sq m rice (NAMCHE5, NERICA4, NERICA1), 4000sq m of banana and 1000sq m of coffee demos planted and maintained. Collected data from 5 farmers having 250bee hives in three subcounties (Kyabigambire, Kitoba and Buseruka) of Hoima District. The data is for identifying bee floral resources used by bees during dry season. | Work still on going, slow progress due to limited fund. |
| Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed | NA | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 221001 Advertising and Public Relations | | 1,787.143 |
| 221007 Books, Periodicals & Newspapers | | 595.714 |
| 221008 Information and Communication Technology Supplies. | | 1,489.286 |
| 221009 Welfare and Entertainment | | 1,787.143 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|------------------------------------|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand | |
| Item | | Spent | |
| 221011 Printing, Stationery, Photocopying and Binding | | 1,787.143 | |
| 221012 Small Office Equipment | | 893.571 | |
| 221017 Membership dues and Subscription fees. | | 595.714 | |
| 222002 Postage and Courier | | 297.857 | |
| 223001 Property Management Expenses | | 1,191.429 | |
| 223004 Guard and Security services | | 2,978.571 | |
| 224010 Protective Gear | | 595.714 | |
| 228002 Maintenance-Transport Equipment | | 2,978.571 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 2,382.857 | |
| 273102 Incapacity, death benefits and funeral expenses | | 893.573 | |
| | | Total For Budget Output | 20,254.286 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 20,254.286 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| | | Total For Department | 20,254.286 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 20,254.286 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 technologies promoted 1 technologies for food and nutrition security generated | Three coffee demonstration sites well maintained at Bugongi, Kalengyere and Kachwekano. | Work still on-going | |
| 2 Demand driven agriculture technologies developed and promoted | Two new potato varieties NAROPOT 5 and 6 released. These varieties are restistant to late blight and are good for processing into chips and crisps | Work still on-going | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|--|--------------------------------------|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 2 Demand driven agriculture technologies developed and promoted | | Two potato demos have been established demonstrating two potato varieties NAROPOT4 and Naropot3 in Rukiga and Rubanda districts for good agronomic practices and seed production | Work still on going. |
| NA | | - | Work still on-going |
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | | Spent |
| 211107 Boards, Committees and Council Allowances | | | 400.000 |
| 221008 Information and Communication Technology Supplies. | | | 2,000.000 |
| 221009 Welfare and Entertainment | | | 1,800.000 |
| 221012 Small Office Equipment | | | 350.000 |
| 223001 Property Management Expenses | | | 2,100.000 |
| 223004 Guard and Security services | | | 10,079.000 |
| 223005 Electricity | | | 800.000 |
| 223006 Water | | | 750.000 |
| 224003 Agricultural Supplies and Services | | | 6,002.000 |
| 224011 Research Expenses | | | 33,843.600 |
| 226001 Insurances | | | 292.500 |
| 227004 Fuel, Lubricants and Oils | | | 4,031.400 |
| 228001 Maintenance-Buildings and Structures | | | 5,001.500 |
| 228002 Maintenance-Transport Equipment | | | 2,400.000 |
| Total For Budget Output | | | 69,850.000 |
| Wage Recurrent | | | 0.000 |
| Non Wage Recurrent | | | 69,850.000 |
| Arrears | | | 0.000 |
| AIA | | | 0.000 |
| Total For Department | | | 69,850.000 |
| Wage Recurrent | | | 0.000 |
| Non Wage Recurrent | | | 69,850.000 |
| Arrears | | | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|--------------------------------------|
| | AIA | 0.000 |
| Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 technologies for food, nutrition and industry promoted in 2 districts of the Zone 1 technologies generated for market and Industry 1 Research facilities maintained to support research | 5500 seedlings of improved coffee (5000) and improved mango varieties (500) , 500 improved paw seedlings were raised in the nursery for uptake by stakeholders.A herd of 172 heads of cattle, 180 goats and 63 pigs dewarmed and controlled of diseases, about 20 acres of pastures fields (in paddocks) mainatined,able 8 paddockd improved by weeding out poisonous weeds and unplatable 30 acres of silage maize established, | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 224002 Veterinary supplies and services | | 3,750.000 |
| 224003 Agricultural Supplies and Services | | 2,500.000 |
| 224011 Research Expenses | | 22,950.000 |
| | Total For Budget Output | 29,200.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 29,200.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 29,200.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 29,200.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010011 Technology Promotion | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|----------------------------|------------------------------------|--------------------------------------|
|----------------------------|------------------------------------|--------------------------------------|

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

| | | |
|--|--|----|
| 1 adaptable seed varieties produced and availed to farmers, 1 technology of new cereal and 1 pulse varieties adapted to NEAZ farmers | Seeds of eggplant (variety black beauty - 10 kg) and tomatoes (variety Rio grande (3kg)) and amaranthus (3Kg) are available for uptake-pathway. | NA |
| NA | a) Participated in the Awoja show , where several NARO proved agricultural technologies such as training participants in the use of a soil test kit, different fertilizers both organic and inorganic and use of the multipurpose legumes in soil fertility improvement. b) One improved variety (NAROsorg3) and two local laces (Eliba and Abir) were selected for their brewery qualities (low Tanin levels). | - |

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened**Programme Intervention: 010407 Strengthen agricultural research and technology development**

| | | |
|---|--|--|
| 2 technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1 biological control strategies on FAW and desert locusts determined. | a) 5 pairs of oxen trained. 10 farmers trained in animal traction technologies. b) Sorghum germplasm collected and field trials established in the zone; Field trials managed. Data on agronomic performance and reaction to field diseases collected and analyzed. (2) One improved variety (NAROsorg3) and two local laces (Eliba and Abir) were selected for their brewery qualities (low Tanin levels). | Work on biological control strategies on FAW was deferred to next quarter. |
| 1 adaptable seed varieties produced and availed to farmers, 1 technology of new cereal and 1 pulse varieties adapted to NEAZ farmers | One improved variety (NAROsorg3) and two local laces (Eliba and Abir) were selected for their brewery qualities (low Tanin levels). | NA |

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

| Item | Spent |
|--|-----------|
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 3,375.000 |
| 211107 Boards, Committees and Council Allowances | 1,250.000 |
| 212103 Incapacity benefits (Employees) | 375.000 |
| 221001 Advertising and Public Relations | 500.000 |
| 221009 Welfare and Entertainment | 475.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 1,411.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|------------------------------------|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| 222002 Postage and Courier | | 150.000 |
| 223001 Property Management Expenses | | 1,000.000 |
| 223004 Guard and Security services | | 1,500.000 |
| 223005 Electricity | | 1,125.000 |
| 224002 Veterinary supplies and services | | 500.000 |
| 224003 Agricultural Supplies and Services | | 2,056.500 |
| 224011 Research Expenses | | 2,200.000 |
| 226001 Insurances | | 100.000 |
| 227004 Fuel, Lubricants and Oils | | 4,800.000 |
| 228001 Maintenance-Buildings and Structures | | 3,132.500 |
| 228002 Maintenance-Transport Equipment | | 3,750.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 1,500.000 |
| | Total For Budget Output | 29,200.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 29,200.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 29,200.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 29,200.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:007 NARO-SECRETARIATE | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|---|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 Impact report on sorghum technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed | NARO work plans FY 2023/2024 developed and submitted to NARO top management. Data management plan for the impact assessment Study and tools for the study developed, and the data collection process conducted for the Impact study on sorghum (not groundnut and sunflower) technologies on the livelihoods and economy of Uganda. (26)Communication handsets procuredand distributed between Narl, MbaZARDI, Buzardi, AbiZARDI and ARDC-Kajjansi . Maintenance of all active equipment Procurement of Research software for PM&E unit and office 365 suit | Field work is on-going (for Impact study sorghum (not groundnut and sunflower) technologies on the livelihoods and economy of Uganda, and market study to inform research and farmer enterprise section) postponed to fourth quarter due to insufficient funds. |
| 1 biosecurity access point for the vaccine research facility diverted and maintained as per guidance from from NationalCouncil of science and technology for National Bio safety committee,PANVAC and global acceptability for commercialization. | Procurement process for a) 1 bio-security access point for the vaccine research initiated. b) One (1) Video conferencing projector procured to be installed at NAROSEC c) Eight (8) VOIP handsets procured for ARIS | The process was delayed to to insufficient funds, |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | Spent | |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 66,334.500 | |
| 211107 Boards, Committees and Council Allowances | 6,294.500 | |
| 221007 Books, Periodicals & Newspapers | 2,040.000 | |
| 221008 Information and Communication Technology Supplies. | 2,608.500 | |
| 221009 Welfare and Entertainment | 7,685.250 | |
| 221011 Printing, Stationery, Photocopying and Binding | 8,880.000 | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|------------------------------------|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| 221012 Small Office Equipment | | 1,483.500 |
| 223001 Property Management Expenses | | 16,827.119 |
| 223004 Guard and Security services | | 16,972.250 |
| 223005 Electricity | | 21,533.500 |
| 223006 Water | | 6,219.000 |
| 224002 Veterinary supplies and services | | 9,420.500 |
| 224003 Agricultural Supplies and Services | | 124,984.250 |
| 224011 Research Expenses | | 906,362.336 |
| 226001 Insurances | | 40,616.889 |
| 227004 Fuel, Lubricants and Oils | | 52,806.475 |
| 228001 Maintenance-Buildings and Structures | | 37,460.750 |
| 228002 Maintenance-Transport Equipment | | 59,133.210 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 9,571.700 |
| 228004 Maintenance-Other Fixed Assets | | 1,771.511 |
| | Total For Budget Output | 1,399,005.740 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 1,399,005.740 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 1,399,005.740 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 1,399,005.740 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:008 National Agricultural Research Laboratories | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|--|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 2 Agriculture Research Innovations and IPs commercialized 1 research products and services for food and nutrition security | Survey tool developed for collecting information on Marketing of tomato products and value addition technologies for improved competitiveness of Small and Medium Processing Enterprises. Work still-on-going. | Due to the limited funds received, work was postponed developing the animal drawn weeding implementer, power tiller weeding implement, Aqua Crop guidelines for maize, |
| Expenditures incurred in the Quarter to deliver outputs | | |
| | | US\$ Thousand |
| Item | Spent | |
| 221008 Information and Communication Technology Supplies. | 3,000.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 4,900.000 | |
| 223001 Property Management Expenses | 2,225.000 | |
| 223004 Guard and Security services | 2,750.000 | |
| 223005 Electricity | 4,750.000 | |
| 223006 Water | 2,950.000 | |
| 224003 Agricultural Supplies and Services | 6,250.000 | |
| 224011 Research Expenses | 33,550.000 | |
| 226001 Insurances | 575.000 | |
| 227004 Fuel, Lubricants and Oils | 5,200.000 | |
| 228002 Maintenance-Transport Equipment | 2,725.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 4,500.000 | |
| | Total For Budget Output | 73,375.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 73,375.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 73,375.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 73,375.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|---|--------------------------------------|
| Department:009 National Coffee Research Institute | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 alternative pathway for utilization of cocoawaste developed. Best-bet coffee system for optimum water useefficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed. 2 Coffee byproducts refined. | Work still on-going on water use efficiency in robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed. Experiments have been set up on station. Study on utilization of cocoa waste developed deferred. | NA |
| PIAP Output: 0103020116 Functional public-private partnerships established for technology development and promotion | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi | Experiments for incidence and damage of coffee pests and diseases are ongoing 2 samples of coffee lotion and 2 samples of cream prepared and sent to UNBS for microbial and chemical testing. • Biochemical sample preparation equipment (Rotary evaporator and pH meters) procured • High Performance Liquid Chromatograph (HPLC) equipment installed and operationalized • Prototypes of coffee lotions and creams produced with extracts from leaves, green cherries and red-ripe cherries, ready for market testing • Samples of coffee-infused yoghurt produced with different roast levels of Robusta coffee and fermentation times gave pH values in the range acceptable by the FDA (4.6 or lower) | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 221007 Books, Periodicals & Newspapers | | 387.325 |
| 221008 Information and Communication Technology Supplies. | | 1,186.182 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|------------------------------------|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| 221009 Welfare and Entertainment | | 2,469.195 |
| 221011 Printing, Stationery, Photocopying and Binding | | 1,101.455 |
| 222002 Postage and Courier | | 242.078 |
| 223001 Property Management Expenses | | 1,077.247 |
| 223004 Guard and Security services | | 968.312 |
| 223005 Electricity | | 1,089.351 |
| 224003 Agricultural Supplies and Services | | 10,590.913 |
| 224010 Protective Gear | | 847.273 |
| 224011 Research Expenses | | 7,542.756 |
| 227004 Fuel, Lubricants and Oils | | 12,648.575 |
| 228001 Maintenance-Buildings and Structures | | 3,914.401 |
| 228002 Maintenance-Transport Equipment | | 2,178.702 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 2,487.352 |
| 228004 Maintenance-Other Fixed Assets | | 121.039 |
| 273102 Incapacity, death benefits and funeral expenses | | 447.844 |
| | Total For Budget Output | 49,300.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 49,300.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 49,300.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 49,300.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:010 National Crops Resources Research Institute | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|--------------------------------------|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 3 market-oriented products generated 5 research products and services suitable for industry developed | Waiting for invitation from Variety release Committee to defend application for release of 7 varieties (3 cassava, 2 sweet potato and 2 ornate maize varieties). DUS test for 6 bean varieties completed by MAAIF; Variety release applications documents for two bean varieties submitted to MAAIF, NPT trials established for 5 promising lines and data collected. | NA |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | Spent | |
| 221001 Advertising and Public Relations | 4,250.000 | |
| 221008 Information and Communication Technology Supplies. | 750.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 1,250.000 | |
| 223004 Guard and Security services | 1,750.000 | |
| 223005 Electricity | 7,450.000 | |
| 224005 Laboratory supplies and services | 750.000 | |
| 224011 Research Expenses | 11,605.000 | |
| 227004 Fuel, Lubricants and Oils | 2,000.000 | |
| 228001 Maintenance-Buildings and Structures | 1,250.000 | |
| 228002 Maintenance-Transport Equipment | 4,000.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 1,000.000 | |
| Total For Budget Output | | 36,055.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 36,055.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Budget Output:010011 Technology Promotion | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|---|--------------------------------------|
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 5 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways. | Five(5) biofortified bean varities including NAROBAN 1,2,3,6 & 7 were promoted, scaled out and marketed in Karomoja and Yumbe; Use of two drought tolerant varieties(NAROBAN 6 & 7), thresher and planter were promoted in Yumbe (Bidi bidi refugee community) and karamoja to enable increased productivity.; 10 acres for breeder and 18 acres for foundation seed production managed. 222 clones (160 cassava and 62 sweetpotato clones) establsihed under TRICOT, AYT, UYT, OFTS in NaCRRI, NaSARRI, Kiige, NgeZARDI, BulZARDI, RweZARDI, Kigumba, Oyam, Arua and Terego | NA |
| 3 Agriculture Research Innovations and IPs commercialized 3 public-private partnerships established for technology development and promotion 2Agricultural research platforms established 5 improved technologies and innovations adapted | Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported in the production of production and marketing of seed grain and bean derived products. | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 221009 Welfare and Entertainment | | 875.000 |
| 224003 Agricultural Supplies and Services | | 5,000.000 |
| 224011 Research Expenses | | 19,125.000 |
| | Total For Budget Output | 25,000.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 25,000.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 61,055.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 61,055.000 |
| | Arrears | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|----------------------------|------------------------------------|--------------------------------------|
| | AIA | 0.000 |

Department:011 National Fisheries Resources Research Institute

Budget Output:010008 Capacity Strengthening

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | | |
|---|---|----|
| 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained | (i) Incorporated fish species distribution maps for 287 fish species and corresponding shapefiles into the portal. The distribution maps were built using the framework of the International Union for Conservation of Nature (IUCN) for mapping the distribution of freshwater species. Therefore, the maps and shapefiles show the origin (Native, Introduced, and Origin Uncertain) and presence (Extant, Possibly Extant, Possibly Extinct, and Presence Uncertain) of the species (ii) Incorporated into the portal, species summary pages for 16 newly described species (H. concilians, H. erutus, H. planus, H. latifrons, H. rex, H. simba, H. glaucus, H. aquila, H. kimondo, H. falcatus, H. curvidens, H. pardus, H. quasimodo, H. gracilifur, H. molossus, H. relictidens) in Lakes Edward, George and Kazinga channel (iii) Completed an information product to visualise water quality status in national water bodies. maintained one of each fish laboratories, aquarium, cage facility. | NA |
|---|---|----|

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

| Item | Spent |
|---|------------|
| 221001 Advertising and Public Relations | 1,886.640 |
| 221007 Books, Periodicals & Newspapers | 943.320 |
| 221008 Information and Communication Technology Supplies. | 786.100 |
| 221009 Welfare and Entertainment | 1,493.590 |
| 221011 Printing, Stationery, Photocopying and Binding | 1,336.370 |
| 223004 Guard and Security services | 2,358.300 |
| 223005 Electricity | 1,965.250 |
| 223006 Water | 1,965.250 |
| 224011 Research Expenses | 10,062.180 |
| 227004 Fuel, Lubricants and Oils | 2,947.875 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| 228001 Maintenance-Buildings and Structures | | 5,974.360 |
| 228002 Maintenance-Transport Equipment | | 1,965.250 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 2,224.590 |
| | Total For Budget Output | 35,909.075 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 35,909.075 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained | Information on impacts of fish cages on water quality and biota at SON cage fish farm documented . Technical Report outlining status of water quality, fish parasites and biota at SON cage fish farm. | NA |
| 12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers) | 1)Maintained 10,000 Nile tilapia F1 generation to be used as quality broodstock (F2 generation) for distribution to private sector and public regional fry centres for seed multiplication; 2). One technology for reduction of anti-nutritional factors in plant-based fish feeds developed; 3). Initiated Laboratory analysis toward characterisation of fish raised from two (2) novel fish feed formulations developed. 4).Ten test formulations of African catfish developed; 5) Acclimatised second batch of juvenile african catfish to conduct onstation feeding trials. 6). Maintained optimisation trials of one pond production system demonstration site in an identified HPAZs. 1). Capacity of 150 fish farmers and 12 extension staff enhanced in aquaculture Best Management Practices of use and management of novel production systems, Nile tilapia and African catfish feed and seed production and management | NA |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|------------------------------------|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | | Spent |
| 224003 Agricultural Supplies and Services | | | 6,325.000 |
| 224011 Research Expenses | | | 3,055.000 |
| 227004 Fuel, Lubricants and Oils | | | 675.000 |
| Total For Budget Output | | | 10,055.000 |
| Wage Recurrent | | | 0.000 |
| Non Wage Recurrent | | | 10,055.000 |
| Arrears | | | 0.000 |
| AIA | | | 0.000 |
| Total For Department | | | 45,964.075 |
| Wage Recurrent | | | 0.000 |
| Non Wage Recurrent | | | 45,964.075 |
| Arrears | | | 0.000 |
| AIA | | | 0.000 |
| Department:012 National Forestry Resources Research Institute | | | |
| Budget Output:010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled | Tools for data collection developed, pretested and digitized. Data collected from avocado farmers in central and western regions 250 samples collected for growing of rootstocks. | Work still on-going | |
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | | Spent |
| 221009 Welfare and Entertainment | | | 1,000.000 |
| 221011 Printing, Stationery, Photocopying and Binding | | | 1,100.000 |
| 222002 Postage and Courier | | | 100.000 |
| 223001 Property Management Expenses | | | 2,000.000 |
| 223004 Guard and Security services | | | 2,484.000 |
| 223005 Electricity | | | 4,170.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|---|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | | Spent |
| 224010 Protective Gear | | | 181.000 |
| 224011 Research Expenses | | | 1,000.000 |
| 227004 Fuel, Lubricants and Oils | | | 3,000.000 |
| 228001 Maintenance-Buildings and Structures | | | 1,000.000 |
| 228002 Maintenance-Transport Equipment | | | 2,000.000 |
| 228004 Maintenance-Other Fixed Assets | | | 1,000.000 |
| Total For Budget Output | | | 19,035.000 |
| Wage Recurrent | | | 0.000 |
| Non Wage Recurrent | | | 19,035.000 |
| Arrears | | | 0.000 |
| AIA | | | 0.000 |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 4 Shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding | a) 4 mother gardens of Shea ethno-varieties conserved in 2 Breeding Seed Orchards maintained b) Existing 7 acres of jack-fruit germplasm bank maintained. | Value chain activities forwarded to next quarter due to insufficient funds. | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 27500 Hass Avocado seedlings produced and extended to famers. | An assortment of inputs purchased. But not enough to conduct activity. | Forwarded to Q4 when fund become available | |
| 7500 Hass Avocado seedlings produced and extended to farmers. | An assortment of inputs purchased. But not enough to conduct activity. | - | |
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | | Spent |
| 221001 Advertising and Public Relations | | | 1,082.479 |
| 221007 Books, Periodicals & Newspapers | | | 324.744 |
| 224011 Research Expenses | | | 8,042.819 |
| Total For Budget Output | | | 9,450.042 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|----------------------------|------------------------------------|--------------------------------------|
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 9,450.042 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 28,485.042 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 28,485.042 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

Department:013 Mukono Zonal Agriculture Research Institute (ZARDI)

Budget Output:010010 Technology Generation

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | | |
|---|---|---|
| 2 Value added products of tomato and pineapple developed and promoted | <p>a) Market study on the varieties, processing and access of the pineapple and tomato products done. Data was collected on various parameters.</p> <p>b) Developed Nakati-flavored confectionery protocols aimed at developing nutritious and economically viable product from our locally grown leafy vegetable, Nakati in addition to increase its consumptionability. Under this, different protocols for different products with different quantities of Nakati powder were developed. Consumer acceptability conducted and feed-back was received and results compiled and are being analysed.</p> <p>c) Developed Apple pectin extraction protocols: This was aimed at developing a natural juice thickener as the synthetic ones are expensive and are reported to be having low digestibility rate. These activities included: washing apples in water; cutting the apples into pieces of appropriate size, adding food grade citric acid to extract pectin.</p> | - |
|---|---|---|

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|---|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | Spent | |
| 221011 Printing, Stationery, Photocopying and Binding | | 1,875.000 |
| 223004 Guard and Security services | | 6,000.000 |
| 223005 Electricity | | 5,250.000 |
| 223006 Water | | 850.000 |
| 224011 Research Expenses | | 8,634.000 |
| 227004 Fuel, Lubricants and Oils | | 1,575.000 |
| | Total For Budget Output | 24,184.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 24,184.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NA | A total of 35,000 cuttings were put into the humid chamber/cages of which 13,259 were sorted out and hardened; 8,960 seedlings were sold, 700 seedlings were used to establish a new coffee demonstration and for gap filling at Kamenyamiggo, 3,500 seedlings are still available for sale; 15,000 are still in the cages and not yet hardened | NA |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced | A total of 35,000 cuttings were put into the humid chamber/cages of which 13,259 were sorted out and hardened; 8,960 seedlings were sold, 700 seedlings were used to establish a new coffee demonstration and for gap filling at Kamenyamiggo, 3,500 seedlings are still available for sale; 15,000 are still in the cages and not yet hardened | - |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|--------------------------------------|
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NA | a) Mother gardens at Ntawo and Kamenyamiggo were maintained by weeding and pruning. b) 700 seedlings were used to establish a new coffee demonstration and for gap filling at Kamenyamiggo. NARO participated in one exhibition in Masaka and exhibited the technologies are the station (coffee, avocado and vegetable seedlings) Purchased an assortment of inputs, but not enough to produce seedlings | - |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | Spent | |
| 221001 Advertising and Public Relations | 1,875.000 | |
| 221009 Welfare and Entertainment | 600.000 | |
| 223001 Property Management Expenses | 2,593.000 | |
| 224011 Research Expenses | 21,891.000 | |
| 226001 Insurances | 500.000 | |
| 228001 Maintenance-Buildings and Structures | 3,375.000 | |
| 228002 Maintenance-Transport Equipment | 3,699.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 1,451.500 | |
| 228004 Maintenance-Other Fixed Assets | 500.000 | |
| 273102 Incapacity, death benefits and funeral expenses | 1,500.000 | |
| Total For Budget Output | | 37,984.500 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 37,984.500 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 62,168.500 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 62,168.500 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|----------------------------|------------------------------------|--------------------------------------|
| | Arrears | 0.000 |
| | AIA | 0.000 |

Department:014 National Livestock Resources Research Institute (NaLIRRI)

Budget Output:010010 Technology Generation

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | | |
|--|---|----|
| 50 MT of conserved feed resources produced 50 Inbred line with different genetic back ground assembled 50 Samples for genotyping collected & processed | 1) Nine months database on production, nutritional, health, functional and conformational traits assembled; 2) Atleast 200 Samples genotyped: 3) Atleast 500 MT of conserved feed (Maize silage, Napier Silage, Grass hay, and Legume hay) produced | NA |
|--|---|----|

| | |
|---|-----------------|
| Expenditures incurred in the Quarter to deliver outputs | US\$hs Thousand |
|---|-----------------|

| Item | Spent |
|---|------------|
| 221003 Staff Training | 5,000.000 |
| 221008 Information and Communication Technology Supplies. | 12,425.000 |
| 221009 Welfare and Entertainment | 3,124.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 1,813.000 |
| 221012 Small Office Equipment | 5,373.000 |
| 221017 Membership dues and Subscription fees. | 5,507.000 |
| 222002 Postage and Courier | 2,862.000 |
| 223001 Property Management Expenses | 3,250.000 |
| 223002 Property Rates | 1,124.500 |
| 223004 Guard and Security services | 10,000.000 |
| 223005 Electricity | 10,000.000 |
| 223006 Water | 2,500.000 |
| 224001 Medical Supplies and Services | 12,555.000 |
| 224002 Veterinary supplies and services | 2,500.000 |
| 224003 Agricultural Supplies and Services | 24,125.000 |
| 224004 Beddings, Clothing, Footwear and related Services | 8,250.000 |
| 224005 Laboratory supplies and services | 4,000.000 |
| 224011 Research Expenses | 22,951.500 |
| 225101 Consultancy Services | 750.000 |
| 226002 Licenses | 1,750.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|--|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | Spent | |
| 227001 Travel inland | | 1,250.000 | |
| 227004 Fuel, Lubricants and Oils | | 500.000 | |
| 228001 Maintenance-Buildings and Structures | | 10,625.000 | |
| 228002 Maintenance-Transport Equipment | | 7,875.000 | |
| 228004 Maintenance-Other Fixed Assets | | 5,000.000 | |
| | | Total For Budget Output | 165,110.000 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 165,110.000 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| | | Total For Department | 165,110.000 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 165,110.000 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| Department:015 National Semi Arid Resources Research Institute (NaSARRI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| Diversity of 1 crop variety germplasm determined, 1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains, | 94 Mungbean +94 Sesame accessions selected for planting and sampling. | Work discontinued mungbean and sesame germplasm due to lack of funds. Farmer field days not conducted in all the sites planted. | |
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | | Spent | |
| 224003 Agricultural Supplies and Services | | 832.500 | |
| 224011 Research Expenses | | 3,885.000 | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|------------------------------------|--------------------------------------|
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand | |
| Item | | | Spent |
| 227004 Fuel, Lubricants and Oils | | | 555.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | | 282.500 |
| | | Total For Budget Output | 5,555.000 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 5,555.000 |
| | | Arrears | 0.000 |
| | | <i>AIA</i> | 0.000 |
| Budget Output:010011 Technology Promotion | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| Generation Seed (EGS) produced to promote uptake of 4 technologies. through private sector. Technologies for food, nutrition and Industry promoted in 1 Districtg located 1 Argo ecological zones | a) Only 5 acres of land planted with breeder seed of BPA 2015A and B. | NA | |
| | b) 1.5 acres of NAROGRAM2 foundation seed established. | | |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand | |
| Item | | | Spent |
| 221001 Advertising and Public Relations | | | 750.000 |
| 221007 Books, Periodicals & Newspapers | | | 1,250.000 |
| 221008 Information and Communication Technology Supplies. | | | 2,750.000 |
| 221009 Welfare and Entertainment | | | 1,250.000 |
| 221011 Printing, Stationery, Photocopying and Binding | | | 750.000 |
| 223001 Property Management Expenses | | | 1,000.000 |
| 223004 Guard and Security services | | | 2,400.000 |
| 223005 Electricity | | | 3,600.000 |
| 223006 Water | | | 1,000.000 |
| 224011 Research Expenses | | | 5,500.000 |
| 226001 Insurances | | | 250.000 |
| 227004 Fuel, Lubricants and Oils | | | 1,500.000 |
| 228002 Maintenance-Transport Equipment | | | 1,500.000 |
| 273102 Incapacity, death benefits and funeral expenses | | | 1,000.000 |
| | | Total For Budget Output | 24,500.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|--------------------------------------|
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 24,500.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 30,055.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 30,055.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:016 Ngetta ZARDI | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 New multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed 3 acre | Procurement of 3 bags (126kgs) of Serenut 14R, 100kgs of MAKSOY 6N & 25kgs of MAKSOY 3N). 8 acres (3 for groundnuts, 5 for soybean) were prepared for production of Early Generation seed. 8 acres (3 for groundnuts, 5 for soybean) were planted for production of Early Generation seed. | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | Spent | |
| 212103 Incapacity benefits (Employees) | 3,000.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 500.000 | |
| 223006 Water | 1,750.000 | |
| 224003 Agricultural Supplies and Services | 4,000.000 | |
| 224011 Research Expenses | 16,170.000 | |
| 228001 Maintenance-Buildings and Structures | 1,250.000 | |
| 228002 Maintenance-Transport Equipment | 1,250.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 1,250.000 | |
| | Total For Budget Output | 29,170.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 29,170.000 |
| | Arrears | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|--------------------------------------|
| | AIA | 0.000 |
| | Total For Department | 29,170.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 29,170.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:017 Rwebitaba ZARDI | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 10,000 clonal plantlets of selected tea clones multiplied. 5 tea clones characterized for biochemical attributes ,2500 open pollinated hybrid tea seeds collected | Genomic prediction models for 3 quality parameters of tea training population (300 tea accessions) developed | - |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 221003 Staff Training | | 1,415.483 |
| 221007 Books, Periodicals & Newspapers | | 707.742 |
| 221008 Information and Communication Technology Supplies. | | 1,321.118 |
| 221009 Welfare and Entertainment | | 1,179.569 |
| 221011 Printing, Stationery, Photocopying and Binding | | 1,415.483 |
| 223001 Property Management Expenses | | 2,595.052 |
| 223004 Guard and Security services | | 2,076.042 |
| 223005 Electricity | | 1,415.483 |
| 223006 Water | | 2,831.066 |
| 224003 Agricultural Supplies and Services | | 2,807.375 |
| 224004 Beddings, Clothing, Footwear and related Services | | 943.655 |
| 224011 Research Expenses | | 15,623.394 |
| 226001 Insurances | | 283.097 |
| 227004 Fuel, Lubricants and Oils | | 4,010.535 |
| 228001 Maintenance-Buildings and Structures | | 1,179.569 |
| 228002 Maintenance-Transport Equipment | | 3,774.622 |
| 228004 Maintenance-Other Fixed Assets | | 1,509.849 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|------------------------------------|--------------------------------------|
| | Total For Budget Output | 45,089.134 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 45,089.134 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 45,089.134 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 45,089.134 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Develoment Projects | | |
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | |
| Budget Output:000017 Infrastructure Development and Managemement | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|---|--------------------------------------|
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed. | a) Completion of Civil works at the Milking parlor at Nakyesasa. b) Aflasafe plant at Project Progress: Civil works- 95%, Equipment supply & Installation- 15%. C) Installation of other mechanical fixtures on going. d) Vaccine production facility Project Progress: 80%, Target progress- 100%. d) Construction of Assorted Infrastructure at Maruzi on going at various level. These include (Haybarn, water supply & reticulation, cattle dip, fencing grazing field 300 acres, toilet block, two residential containers. e) Hay barn at Nakyesasa complete, waterborne toilet complete, Office container units 100% complete, paddocking at 86% (20 fully done, 06 not complete), d) cattle dip at 100% and water reticulation at 85%. e) Construction of Residential staff blocks at Maruzi. Project Progress:85% Target progress- 100%. • Chain link fence construction on going. f) Water extension project to Maruzi. Progress:40%, Diversion of the Access Road from the Vaccine Research facility Progress: 40%. | NA |
| 1 Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed. | Chain link fence construction done, Construction/ Extension of power line & Reticulation to the Maruzi Farm-Apac. Progress:100%. .. Work on the master plan for ten square miles initiated and still on going. | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| | Total For Budget Output | 156,398.607 |
| | GoU Development | 156,398.607 |
| | External Financing | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|---|
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1MT ton of forage seed produced, 1 high yielding brachiria developed,1 low-cost pig feeding packages based on forages and animal waste developed, 2 forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 of Jersey crosses | 1) 150 tons of hay (100 acres) produced; 3) 800 tons of maize silage produced; 2) Nine Months Database on First season performacne of 10 bracharia candidate varieties assembled from 8 locations, and DUS site 3) Database for 20 agronomic & nutritional /sugar biochemical developed; 2) Ensiled 190 samples in laboratory silos; 3) Dry Matter and sugar content of atleast 50 inbredlines determined | Work on pig feed not done due to insufficient funds |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 Community Constraint Diagnostic Study Conducted | a) One technology promotion and mass awareness event conducted per participation zone. | NA |
| 1 MT tons of forage seed produced, 2 high yielding brachiria developed, 3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified | 1) 150 tons of hay (100 acres) produced; 3) 800 tons of maize silage produced; 2) Nine Months Database on First season performacne of 10 bracharia candidate varieties assembled from 8 locations, and DUS site 3) Database for 20 agronomic & nutritional /sugar biochemical developed; 2) Ensiled 190 samples in laboratory silos; 3) Dry Matter and sugar content of atleast 50 inbredlines determined | NA |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| Total For Budget Output | | 823,000.000 |
| GoU Development | | 823,000.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|--|
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Project | 979,398.607 |
| | GoU Development | 979,398.607 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Project:1619 Retooling of National Agricultural Research Organization | | |
| Budget Output:000003 Facilities and Equipment Management | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation | A) Research laboratories have been maintained. a) Construction of reception at gate, renovation of NARO village, canteen toilets & kitchen at NAROSEC Offices Entebbe. b) Construction of a 19,000 m3 Water Reservoir at Kigumba Farm at Project progress: 40%, Target progress: 100%. c) Construction of Administration block at NARL-Namalere (AEATREC). Project Progress: 100%, Target progress- 100%. d) Renovation of Hostel, Lab & Office Blocks at Abi ZARDI Project Progress: 85%, Target progress- 100%. e) Renovation and Remodeling of Bugusege-Guest House into Residential House (NaCORI). B) Research laboratories equipped and supplied with consumables to support research the procurement process is still on-going. | a) Activities for research laboratories to be audited and upgraded towards accreditation were not implemented. b) Research laboratories equipped and supplied with consumables to support research the procurement process is still on-going. |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|--|--|---|
| Project:1619 Retooling of National Agricultural Research Organization | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 8 Public Agricultural research Institutes retooled with computers | Delivery of 50 UPS completed. | Supply of desktop computers still pending from the supplier but the contract was awarded. |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| | Total For Budget Output | 9,527,027.607 |
| | GoU Development | 9,527,027.607 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of 1 National laboratories. 2 titles acquired for research land | Staff facilitated to attend longterm and short term skills improvement programmes (tuition fees payment for 2 PhD students, 1 PGD and 1 MSc and Professional Development for 6 Admin Assistants and 19 Procurement Officers) | Work on acquiring land titles and accreditation of laboratories not initiated due to lack of funds. |
| Expenditures incurred in the Quarter to deliver outputs | | US\$ Thousand |
| Item | | Spent |
| 224011 Research Expenses | | 1,820,525.500 |
| 227004 Fuel, Lubricants and Oils | | 49,796.400 |
| | Total For Budget Output | 3,113,542.095 |
| | GoU Development | 3,113,542.095 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010009 Research Partnerships | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|--|------------------------------------|--|
| Project:1619 Retooling of National Agricultural Research Organization | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| NNARO annual subscription to 1 international research organizations maintained | Contribution to International Organizations were made for one international organisation I.e. Biodiversity International (IPGRI). | | The development budget on the other hand was been provided with 43.57% of the annual budget . |
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | Spent | | |
| | Total For Budget Output | | 420,001.267 |
| | GoU Development | | 420,001.267 |
| | External Financing | | 0.000 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 9 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 3 of research products and services suitable for food Nutrition and industry developed | 34 agricultural research studies were initiated and principal Investigators were inducted into CGS cohort VI. The research studies will generate information and products for industry conducted under the competitive grants scheme approach. | | 135 projects proposals received were subjected to a series of reviews as follows; Administrative Review, where 27% (n= 37) of the proposals were dropped; blind reviews with experts' specific areas led to 73 %(n= 98) projects being selected. Technical Review by Experts. NARO Management led to selection for funding 34 . |
| Expenditures incurred in the Quarter to deliver outputs | | | US\$ Thousand |
| Item | Spent | | |
| 224003 Agricultural Supplies and Services | | | 976,740.000 |
| 224011 Research Expenses | | | 2,048,060.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|---|--------------------------------------|
| Project:1619 Retooling of National Agricultural Research Organization | | |
| | Total For Budget Output | 3,554,121.490 |
| | GoU Development | 3,554,121.490 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 agricultural research innovations and IPs commercialized, 1 multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-Private Partnerships established for for technology development and promotion | 1) At NACRRI. Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported to produce, market seed grain and bean value added products. At Abi ZARDI, the cassava Multistakeholders innovation platforms strengthened. 3. Fish Multistakeholder Innovation Platforms Strengthened, NARO is building internal capacity for managing and undertaking intellectual property of research innovations. NARO secretariat conducted IP trainings in 5 NARO Institutes NARL, NaCRRI, Ngetta ZARDI, Bulindi ZARDI and Abi ZARDI. What happened and what was achieved, and what outcome? At NARL, NARO expends on efforts to promote two improved technologies, i.e the NARO fish smoking kiln and NARL made Mat-blocks. In the previous financial year, NARO launched the NARO-Fish Smoking Kiln at Kasenyi sites. The performance of 5 fish processing entrepreneurs using the NARO Fish Smoking Kiln in central and eastern region monitored. 2. NARL and Ebenezer company have a working relationship. | - |
| Expenditures incurred in the Quarter to deliver outputs | | UShs Thousand |
| Item | | Spent |
| 224003 Agricultural Supplies and Services | | 459,000.000 |
| 224011 Research Expenses | | 1,147,500.000 |
| | Total For Budget Output | 1,910,215.774 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Outputs Planned in Quarter | Actual Outputs Achieved in Quarter | Reasons for Variation in performance |
|---|------------------------------------|--------------------------------------|
| Project:1619 Retooling of National Agricultural Research Organization | | |
| | GoU Development | 1,910,215.774 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Project | 18,524,908.233 |
| | GoU Development | 18,524,908.233 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | GRAND TOTAL | 35,188,552.498 |
| | Wage Recurrent | 9,950,777.318 |
| | Non Wage Recurrent | 5,733,468.340 |
| | GoU Development | 19,504,306.840 |
| | External Financing | 0.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

Quarter 3: Cumulative Outputs and Expenditure by End of Quarter

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|---|--|---|
| Programme:01 Agro-Industrialization | | |
| SubProgramme:01 Institutional Strengthening and Coordination | | |
| Sub SubProgramme:01 Agricultural Research | | |
| Departments | | |
| Department:007 NARO-SECRETARIATE | | |
| Budget Output:000001 Audit and Risk Management | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 11 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research. | Two specail reports produced and shared. The report on NAROSEC Finance Committee and Civil works. One audit report on the status of implementing audit recommendations for FY2021/2022 produced by PARI Internal audit staff. Produce 1 report advising on the effective management of governance, social and environmental issues Risk Assessment meetings held at held at MbaZARDI, KaZARDI,NaFORRI and NaCORI and respective risk Regsiers updated One audit report on the status of implementing audit recommendations for FY2021/2022 produced by PARI Internal audit staff. Risk Assessment meetings held jointly with PARIs Resident Auditors, DOR, PL at NaFIRRI, NaCORI, NaFORRI, BULINDI, NaRL, NaLIRRI and MUZARDI. Final draft Biological Assets register formulated and tested at NaLIRRI One Off budget project audit report produced highlighting compliance to contractual terms and attainment of objectives. One report produced on special assignment undertaken to validate progress and actions taken by manage | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | | Spent |
| 221003 Staff Training | | 14,963.360 |
| 224011 Research Expenses | | 73,706.025 |
| Total For Budget Output | | 88,669.385 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 88,669.385 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter | |
|------------------------|---|-------|
| | Arrears | 0.000 |
| | AIA | 0.000 |

Budget Output:000014 Administrative and Support Services

PIAP Output: 01040701 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|---|
| Annual subscription for insurance of research vessels, machinery and equipment maintained. | a) office equipment maintained.(Desktop computers and printers) |
| 6Public-Private Partnerships established for technology | b) Initiated 2 Public-Private Partnerships established for technology |
| 16 research support infrastructure establishment supported | generation and promotion. |
| 8 Governing council sessions supported | c) Governing council sessions supported. |

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | US\$hs Thousand |
|--|-----------------|
|--|-----------------|

| Item | Spent |
|--|----------------|
| 211102 Contract Staff Salaries | 29,853,331.954 |
| 211104 Employee Gratuity | 7,277,082.990 |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 335,065.900 |
| 212101 Social Security Contributions | 2,910,833.126 |
| 212102 Medical expenses (Employees) | 659,012.000 |
| 212103 Incapacity benefits (Employees) | 175,772.757 |
| 221009 Welfare and Entertainment | 59,370.001 |
| Total For Budget Output | 41,270,468.728 |
| Wage Recurrent | 29,853,331.954 |
| Non Wage Recurrent | 11,417,136.774 |
| Arrears | 0.000 |
| AIA | 0.000 |
| Total For Department | 41,359,138.113 |
| Wage Recurrent | 29,853,331.954 |
| Non Wage Recurrent | 11,505,806.159 |
| Arrears | 0.000 |
| AIA | 0.000 |

Development Projects

N/A

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--|---|--|
| SubProgramme:02 Agricultural Production and Productivity | | | |
| Sub SubProgramme:01 Agricultural Research | | | |
| Departments | | | |
| Department:001 Abi Zonal Agriculture Research Institute(ZARDI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 13 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 56,000 seedlings of (10,000) Mango, five thousand (5,000) Citrus, Ten thousand (10,000) Avocado | | Two hectares of two newly released cassava varieties (Mukumba & Ug 120/193)fields maintained both on station and Arua district Olupi parish. | |
| Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product | | 1) Efficacy of multi-nutrient blocks for livestock feeds tested. 2) Information on nutrient composition of two candidate fish products profiled. | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product | | a) One fish branded nutritive product profiled. b) Assorted inputs for one cereal gene bank purchased. | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | Spent | |
| 224011 Research Expenses | | 36,680.000 | |
| Total For Budget Output | | 36,680.000 | |
| Wage Recurrent | | 0.000 | |
| Non Wage Recurrent | | 36,680.000 | |
| Arrears | | 0.000 | |
| AIA | | 0.000 | |
| Budget Output:010011 Technology Promotion | | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|--|---|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Two functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 2 selected commodities of sorghum and goats in West Nile region | Fish multistakeholder Innovation Platforms Established and Strengthened (West Nile Fish Innovation Platform formed, leadership structure established, 3 of who are females out of a committee of 9; capacity of the leaders built with help from Uganda Private Sector Foundation, UPSF) | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Forty-five thousand high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted Two climate resilient and farmer preffered dry land legumes varieties 6 newly released root crop varieties promoted | One hectare of land prepared, planted and soil and water conservation structures constructed for hectare of improved citrus varieties . | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | Spent | |
| 221008 Information and Communication Technology Supplies. | 500.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 13,570.000 | |
| 222001 Information and Communication Technology Services. | 375.000 | |
| 224003 Agricultural Supplies and Services | 20,000.000 | |
| 224011 Research Expenses | 40,120.000 | |
| 227004 Fuel, Lubricants and Oils | 5,435.000 | |
| | Total For Budget Output | 80,000.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 80,000.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 116,680.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 116,680.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|--|
| 4 partnerships promoted for technology generation 2 research products commercialized 3 research platforms established | 16 Dairy beneficiaries of cattle sheds during ATAAS followed and identified for enhanced partnership in Bududa (07), Sironko (05) and Bulambuli (04) commodity based partnerships (Bushikan Intergrated Area Cooperative Enterprises Ltd, Bukhoko Dubaana, Buginyanya Upland Company Ltd and Ibero Uganda in Bududa, Namisidwa and Bulambuli districts respectively initiated along the commodity value chain (Arabica coffee) |
|---|--|

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|-------------|
| 211107 Boards, Committees and Council Allowances | 5,740.000 |
| 212103 Incapacity benefits (Employees) | 1,764.000 |
| 221001 Advertising and Public Relations | 5,216.000 |
| 221007 Books, Periodicals & Newspapers | 1,356.000 |
| 221008 Information and Communication Technology Supplies. | 6,260.000 |
| 221009 Welfare and Entertainment | 1,200.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 5,272.000 |
| 221012 Small Office Equipment | 2,088.000 |
| 222001 Information and Communication Technology Services. | 16,827.000 |
| 223001 Property Management Expenses | 3,128.000 |
| 223004 Guard and Security services | 13,044.000 |
| 223005 Electricity | 4,176.000 |
| 223006 Water | 3,132.000 |
| 224011 Research Expenses | 18,264.000 |
| 226001 Insurances | 520.000 |
| 227004 Fuel, Lubricants and Oils | 5,220.000 |
| 228001 Maintenance-Buildings and Structures | 2,608.000 |
| 228002 Maintenance-Transport Equipment | 21,200.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 5,220.000 |
| 228004 Maintenance-Other Fixed Assets | 2,608.000 |
| Total For Budget Output | 124,843.000 |
| Wage Recurrent | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter | |
|------------------------|---|-------------|
| | Non Wage Recurrent | 124,843.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

Budget Output:010010 Technology Generation

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|--|
| Four (4) Industrial products for yield improvement and commercialization developed for industry | Trials for wheat and maize at AYT and NPT respectively successful harvested and final yield data being collected. Intent to release highland maize varieties with adequate resistance to major pests and diseases submitted to NAROSEC for discussion and possible consideration |
| Two varieties with adequate resistance to major pests and diseases developed to support house food security and incomes Two packages for sustainable disease management in Arabica coffee and potato developed | The treatments with different fungicides for management of CLR and CBD were imposed and the trial is being monitored with different data points being collected. |

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|---|
| 2 pests resistant varieties 2 disease management packages for strategic crops Generate 25 tons of potato seed 15 adaptive trials, demos 4 Industrial products for yield improvement developed 4 scientific papers published | 2.7 t of foundation seed of potato harvested from the field and 56000 mini-tubers harvested from the screen-house |
|--|---|

| | |
|--|---------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | US\$ Thousand |
|--|---------------|

| Item | Spent |
|---|------------|
| 221011 Printing, Stationery, Photocopying and Binding | 3,101.000 |
| 221012 Small Office Equipment | 1,070.000 |
| 224002 Veterinary supplies and services | 1,000.000 |
| 224003 Agricultural Supplies and Services | 13,800.000 |
| 224011 Research Expenses | 9,200.000 |
| 227004 Fuel, Lubricants and Oils | 3,600.000 |
| 228002 Maintenance-Transport Equipment | 1,200.000 |
| Total For Budget Output | 32,971.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 32,971.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter | |
|------------------------|---|-------|
| | Arrears | 0.000 |
| | AIA | 0.000 |

Budget Output:010011 Technology Promotion

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|--|
| 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | - 2.7 t of foundation seed of potato harvested from the field. - 2.5 acres of land have been prepared for multiplication of foundation seed of potato |
| Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | Five papers submitted and accepted for publication, presented eight papers at the recent NARO-MAK Conference |

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|---|
| Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | Five peer reviewed papers accepted but not yet published, a number of dissemination materials produced, one publication with Global Review Publishers & a number of Television Documentaries produced and aired |
| 15 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies | 10 demonstration plots on new candidate maize varieties established in Bukwo, Kapchorwa, Kween and Bulambuli and just at germination stage |

PIAP Output: 0103020112 Agricultural Research platforms established

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|--|
| 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | 10 demonstration plots on new candidate maize varieties established in Bukwo, Kapchorwa, Kween and Bulambuli and just at germination stage |
|--|--|

| | |
|--|---------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|

| Item | Spent |
|--|-----------|
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 8,696.000 |
| 211107 Boards, Committees and Council Allowances | 3,828.000 |
| 212103 Incapacity benefits (Employees) | 1,392.000 |
| 221001 Advertising and Public Relations | 3,480.000 |
| 221007 Books, Periodicals & Newspapers | 904.000 |
| 221008 Information and Communication Technology Supplies. | 4,176.000 |
| 221009 Welfare and Entertainment | 800.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 5,420.000 |
| 221012 Small Office Equipment | 1,392.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|--|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | | Spent |
| 222001 Information and Communication Technology Services. | | 11,220.000 |
| 223001 Property Management Expenses | | 2,084.000 |
| 223004 Guard and Security services | | 8,692.000 |
| 223005 Electricity | | 2,784.000 |
| 223006 Water | | 2,084.000 |
| 224002 Veterinary supplies and services | | 2,793.000 |
| 224003 Agricultural Supplies and Services | | 5,652.000 |
| 224011 Research Expenses | | 14,740.000 |
| 226001 Insurances | | 348.000 |
| 227004 Fuel, Lubricants and Oils | | 3,480.000 |
| 228001 Maintenance-Buildings and Structures | | 1,740.000 |
| 228002 Maintenance-Transport Equipment | | 13,916.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | | 3,480.000 |
| 228004 Maintenance-Other Fixed Assets | | 1,736.000 |
| Total For Budget Output | | 104,837.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 104,837.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 262,651.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 262,651.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010010 Technology Generation | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|---|
| 2 MSIPs (Soybean and Rice) Initiated to promote technologies 5 crop, 3 livestock and 2 post-harvest handling technologies & practices promoted 5 Climate smart agricultural technologies demonstrated | One chicken house constructed and another renovated for on-farm demonstration, and 4 chicken runs constructed to promote semi-intensive system.. One partnership MOU with SYOVA Ltd seed company in place, and BUZARDI is hosting their seed and vegetable demos |
| Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed | Procurement of materials and items for Q3 activities finalised • Establishment of Half an Acre of Hass Avoado mother garden on-station for nutrient management is already done, • Vegetable production (Tomatoes and cabbages) under different training conditions is running • Evaluating 4 elite Rice varieites (NAMCHE5, SUPA, NERICA4 & NERICA10) for water use efficiencie under different water retention technologies trial is ongoing.(0.5 Acres) • Banana-Coffee agroforestry system established on-station and on-farm |

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|--|
| Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed | a) 4000 sq m of maize (Longe 10H and Bazooka), 570 sq m of sorghum (NAROSORG4), 380 sq m of millet (NAROMIL2), 76sq m Nakatti, 114sq m rice (NAMCHE5, NERICA4, NERICA1), 4000sq m of banana and 1000sq m of coffee demos planted and maintained. b) Developed the protocol and data collection tool to generate information on preferred bee floral resources c) Acquired five pollen collecting traps for collection of pollen samples from 5 apiaries. |
| Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed | NA |

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|-----------|
| 221001 Advertising and Public Relations | 7,148.572 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|---|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | Spent | |
| 221007 Books, Periodicals & Newspapers | 2,382.856 | |
| 221008 Information and Communication Technology Supplies. | 5,957.144 | |
| 221009 Welfare and Entertainment | 7,148.572 | |
| 221011 Printing, Stationery, Photocopying and Binding | 7,148.572 | |
| 221012 Small Office Equipment | 3,574.284 | |
| 221017 Membership dues and Subscription fees. | 2,382.856 | |
| 222002 Postage and Courier | 1,191.428 | |
| 223001 Property Management Expenses | 4,765.716 | |
| 223004 Guard and Security services | 11,914.284 | |
| 224010 Protective Gear | 2,382.856 | |
| 224011 Research Expenses | 57,882.856 | |
| 228002 Maintenance-Transport Equipment | 11,914.284 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 9,531.428 | |
| 273102 Incapacity, death benefits and funeral expenses | 3,574.292 | |
| Total For Budget Output | | 138,900.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 138,900.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 138,900.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 138,900.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Six technologies promoted for food, nutrition and industry Two technologies for food and nutrition security generated | Three coffee demonstration sites well maintained at Bugongi, Kalengyere and Kachwekano. | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|---|--|---|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 8 Demand driven agriculture technologies developed and promoted for food and nutrition security; and industry | Two new potato varieties NAROPOT 5 and 6 were released. These varieties are resistant to late blight and are good for processing into chips and crisps | |
| 8 Demand driven agriculture technologies developed and promoted for food and nutrition; and industry | Two potato demos have been established demonstrating two potato varieties NAROPOT4 and Naropot3 in Rukiga and Rubanda districts for good agronomic practices and seed production | |
| 8 Demand driven agriculture technologies developed and promoted | - | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | US\$ Thousand |
| Item | Spent | |
| 211107 Boards, Committees and Council Allowances | 1,600.000 | |
| 221008 Information and Communication Technology Supplies. | 8,000.000 | |
| 221009 Welfare and Entertainment | 7,200.000 | |
| 221012 Small Office Equipment | 1,400.000 | |
| 222001 Information and Communication Technology Services. | 600.000 | |
| 223001 Property Management Expenses | 8,400.000 | |
| 223004 Guard and Security services | 40,316.000 | |
| 223005 Electricity | 3,200.000 | |
| 223006 Water | 3,000.000 | |
| 224003 Agricultural Supplies and Services | 24,008.000 | |
| 224011 Research Expenses | 69,074.400 | |
| 226001 Insurances | 1,170.000 | |
| 227004 Fuel, Lubricants and Oils | 16,125.600 | |
| 228001 Maintenance-Buildings and Structures | 20,006.000 | |
| 228002 Maintenance-Transport Equipment | 9,600.000 | |
| Total For Budget Output | | 213,700.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 213,700.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 213,700.000 |
| Wage Recurrent | | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter | |
|------------------------|---|-------------|
| | Non Wage Recurrent | 213,700.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI)

Budget Output:010008 Capacity Strengthening

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|--|
| Five technologies for food, nutrition and industry promoted in ten districts of the Zone Two technologies generated for market and Industry 6 Research facilities maintained to support research | 5500 seedlings of improved coffee (5000) and improved mango varieties (500) , 500 improved paw seedlings were raised in the nursery for uptake by stakeholders.A herd of 172 heads of cattle, 180 goats and 63 pigs dewarmed and controlled of diseases, about 20 acres of pastures fields (in paddocks) mainatined,able 8 paddockd improved by weeding out poisonous weeds and unplatable 30 acres of silage maize established, |
|--|--|

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|-------------|
| 224002 Veterinary supplies and services | 15,000.000 |
| 224003 Agricultural Supplies and Services | 10,000.000 |
| 224011 Research Expenses | 91,800.000 |
| Total For Budget Output | 116,800.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 116,800.000 |
| Arrears | 0.000 |
| AIA | 0.000 |
| Total For Department | 116,800.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 116,800.000 |
| Arrears | 0.000 |
| AIA | 0.000 |

Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI)

Budget Output:010011 Technology Promotion

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|---|--|---|--|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers | | (1) Protocol for production of vegetable seeds, and biomas form utility determined; Protocol for production of vegetable seeds, and biomas form utility validated, Germplasm collected and field trials established in the zone; Protocol for production of vegetable seeds, and biomas form utility validated, (2) Seeds of eggplant (variety black beauty - 10kg) and tomatoes (variety Rio grande (3kg)) and amaranthus (3Kg)are available for uptakepathway. | |
| Seven (07) technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined. | | a) Participated in 3 shows. (b) Germplasm collected and field trials established in the zone; Field trials managed. Data on agronomic performance and reaction to field diseases collected and analyzed. (c) One improved variety (NAROsorg3) and two local laces (Eliba and Abir) were selected for their brewery qualities (low Tanin levels). | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| Seven (07) technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined. | | a) Trained 15 beekeepers from the districts of Kaabong, Kotido, Moroto &Amudat on productionand development of bee products. Maintained one Apiary at Nabuin and repaired 4bee suits. Harvested 56kg of comb honey, processed 38kg. Two apiaries maintained on-station with 32 bee colonies. b) 5 pairs of oxen trained. 10 farmers trained in animal traction technologies. (1) Sorghum germplasm collected and field trials established in the zone; Field trials managed. Data on agronomic performance and reaction to field diseases collected and analyzed. (2) One improved variety (NAROsorg3) and two local laces (Eliba and Abir) were selected for their brewery qualities (low Tanin levels). | |
| 4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers | | (1) Germplasm collected and field trials established in the zone; Field trials managed. Data on agronomic performance and reaction to field diseases collected and analyzed. (2) One improved variety (NAROsorg3) and two local laces (Eliba and Abir) were selected for their brewery qualities (low Tanin levels). | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|------------|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | Spent | |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 13,500.000 | |
| 211107 Boards, Committees and Council Allowances | 5,000.000 | |
| 212103 Incapacity benefits (Employees) | 1,500.000 | |
| 221001 Advertising and Public Relations | 2,000.000 | |
| 221009 Welfare and Entertainment | 1,900.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 5,644.000 | |
| 222002 Postage and Courier | 600.000 | |
| 223001 Property Management Expenses | 4,000.000 | |
| 223004 Guard and Security services | 6,000.000 | |
| 223005 Electricity | 4,500.000 | |
| 224002 Veterinary supplies and services | 2,000.000 | |
| 224003 Agricultural Supplies and Services | 8,226.000 | |
| 224011 Research Expenses | 8,800.000 | |
| 226001 Insurances | 400.000 | |
| 227004 Fuel, Lubricants and Oils | 19,200.000 | |
| 228001 Maintenance-Buildings and Structures | 12,530.000 | |
| 228002 Maintenance-Transport Equipment | 15,000.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 6,000.000 | |
| Total For Budget Output | | 116,800.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 116,800.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 116,800.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 116,800.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Department:007 NARO-SECRETARIATE | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--|---|--|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed, | | NARO work plans FY 2023/2024 developed and submitted to NARO top management. Data management plan for the impact assessment Study and tools for the study developed, and the data collection process conducted for the Impact study on sorghum (not groundnut and sunflower) technologies on the livelihoods and economy of Uganda. (26)Communication handsets procuredand distributed between Narl, MbaZARDI, Buzardi, AbiZARDI and ARDC-Kajjansi . Maintenance of all active equipment Procurement of Research software for PM&E unit and office 365 suit | |
| 1 biosecurity access point for the vaccine research facility diverted and maintained as per guidance from from National Council of science and technology for National Bio safety committee, PANVAC and global acceptability for commercialization. | | Procurement process for a) 1 bio-security access point for the vaccine research initiated. b) One (1) Video conferencing projector procured to be installed at NAROSEC c) Eight (8) VOIP handsets procured for ARIS | |

| | |
|---|----------------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | <i>UShs Thousand</i> |
|---|----------------------|

| Item | Spent |
|--|-------------|
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 198,216.500 |
| 211107 Boards, Committees and Council Allowances | 26,765.300 |
| 221007 Books, Periodicals & Newspapers | 3,783.000 |
| 221008 Information and Communication Technology Supplies. | 7,825.500 |
| 221009 Welfare and Entertainment | 23,055.750 |
| 221011 Printing, Stationery, Photocopying and Binding | 25,931.000 |
| 221012 Small Office Equipment | 4,450.500 |
| 222001 Information and Communication Technology Services. | 29,065.500 |
| 222002 Postage and Courier | 735.176 |
| 223001 Property Management Expenses | 45,103.119 |
| 223004 Guard and Security services | 40,974.750 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|--|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | | Spent |
| 223005 Electricity | | 47,519.750 |
| 223006 Water | | 18,657.000 |
| 224002 Veterinary supplies and services | | 28,261.500 |
| 224003 Agricultural Supplies and Services | | 334,654.950 |
| 224004 Beddings, Clothing, Footwear and related Services | | 13,830.000 |
| 224011 Research Expenses | | 2,443,913.540 |
| 226001 Insurances | | 40,829.389 |
| 227001 Travel inland | | 17,961.500 |
| 227004 Fuel, Lubricants and Oils | | 184,709.725 |
| 228001 Maintenance-Buildings and Structures | | 217,504.429 |
| 228002 Maintenance-Transport Equipment | | 111,942.898 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | | 32,167.950 |
| 228004 Maintenance-Other Fixed Assets | | 5,585.460 |
| 352882 Utility Arrears Budgeting | | 143,762.518 |
| Total For Budget Output | | 4,047,206.704 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 3,903,444.186 |
| Arrears | | 143,762.518 |
| AIA | | 0.000 |
| Total For Department | | 4,047,206.704 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 3,903,444.186 |
| Arrears | | 143,762.518 |
| AIA | | 0.000 |
| Department:008 National Agricultural Research Laboratories | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|--|
| 1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize 5 Agriculture Research Innovations and IPs commercialized 4 research products and services for food and nutrition s | - Survey tool developed for collecting information on Marketing of tomato products and value addition technologies for improved competitiveness of Small and Medium Processing Enterprises. Work still-on-going. |
|--|--|

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|--------------------|
| 221008 Information and Communication Technology Supplies. | 12,000.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 19,600.000 |
| 222001 Information and Communication Technology Services. | 4,875.000 |
| 223001 Property Management Expenses | 8,900.000 |
| 223004 Guard and Security services | 11,000.000 |
| 223005 Electricity | 19,000.000 |
| 223006 Water | 11,800.000 |
| 224003 Agricultural Supplies and Services | 25,000.000 |
| 224011 Research Expenses | 134,200.000 |
| 226001 Insurances | 2,300.000 |
| 227004 Fuel, Lubricants and Oils | 20,800.000 |
| 228002 Maintenance-Transport Equipment | 10,900.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 18,000.000 |
| Total For Budget Output | 298,375.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 298,375.000 |
| Arrears | 0.000 |
| <i>AIA</i> | 0.000 |
| Total For Department | 298,375.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 298,375.000 |
| Arrears | 0.000 |
| <i>AIA</i> | 0.000 |

Department:009 National Coffee Research Institute

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | | | |
|---|--|---|---------------|--|--|
| Budget Output:010008 Capacity Strengthening | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refi | | Work still on-going on water use efficiency in robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed. Experiments have been set up on station. | | | |
| PIAP Output: 0103020116 Functional public-private partnerships established for technology development and promotion | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refine | | Experiments for incidence and damage of coffee pests and diseases are ongoing 2 samples of coffee lotion and 2 samples of cream prepared and sent to UNBS for microbial and chemical testing. • Biochemical sample preparation equipment (Rotary evaporator and pH meters) procured • High Performance Liquid Chromatograph (HPLC) equipment installed and operationalized • Prototypes of coffee lotions and creams produced with extracts from leaves, green cherries and red-ripe cherries, ready for market testing • Samples of coffee-infused yoghurt produced with different roast levels of Robusta coffee and fermentation times gave pH values in the range acceptable by the FDA (4.6 or lower) | | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | | UShs Thousand | | |

| Item | Spent |
|---|-----------|
| 221007 Books, Periodicals & Newspapers | 1,549.300 |
| 221008 Information and Communication Technology Supplies. | 4,744.728 |
| 221009 Welfare and Entertainment | 9,876.780 |
| 221011 Printing, Stationery, Photocopying and Binding | 4,405.820 |
| 222002 Postage and Courier | 968.312 |
| 223001 Property Management Expenses | 4,308.988 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|-------------------------|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | | Spent |
| 223004 Guard and Security services | | 3,873.248 |
| 223005 Electricity | | 4,357.404 |
| 224003 Agricultural Supplies and Services | | 42,363.652 |
| 224010 Protective Gear | | 3,389.092 |
| 224011 Research Expenses | | 30,171.024 |
| 227004 Fuel, Lubricants and Oils | | 50,594.300 |
| 228001 Maintenance-Buildings and Structures | | 15,657.604 |
| 228002 Maintenance-Transport Equipment | | 8,714.808 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | | 9,949.408 |
| 228004 Maintenance-Other Fixed Assets | | 484.156 |
| 273102 Incapacity, death benefits and funeral expenses | | 1,791.376 |
| | Total For Budget Output | 197,200.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 197,200.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 197,200.000 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 197,200.000 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:010 National Crops Resources Research Institute | | |
| Budget Output:010008 Capacity Strengthening | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|--|
| 10 market-oriented products generated 5 research products and services suitable for industry developed | Waiting for invitation from Variety release Committee to defend application for release of 7 varieties (3 cassava, 2 sweet potato and 2 ornate maize varieties). DUS test for 6 bean varieties completed by MAAIF; Variety release applications documents for two bean varieties submitted to MAAIF, NPT trials established for 5 promising lines and data collected. |
|---|--|

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | US\$ Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|-------------|
| 221001 Advertising and Public Relations | 17,000.000 |
| 221008 Information and Communication Technology Supplies. | 3,000.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 5,000.000 |
| 222001 Information and Communication Technology Services. | 2,250.000 |
| 223004 Guard and Security services | 7,000.000 |
| 223005 Electricity | 29,800.000 |
| 224005 Laboratory supplies and services | 3,000.000 |
| 224011 Research Expenses | 46,420.000 |
| 227004 Fuel, Lubricants and Oils | 8,000.000 |
| 228001 Maintenance-Buildings and Structures | 5,000.000 |
| 228002 Maintenance-Transport Equipment | 16,000.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 4,000.000 |
| Total For Budget Output | 146,470.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 146,470.000 |
| Arrears | 0.000 |
| AIA | 0.000 |

Budget Output:010011 Technology Promotion

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|---|
| 15 Agriculture Research products for food, nutrition and industry promoted along uptake pathways. | Five(5) biofortified bean varities including NAROBEAN 1,2,3,6 & 7 were promoted, scaled out and marketed in Karomoja and Yumbe; Use of two drought tolerant varieties(NAROBEAN 6 & 7), thresher and planter were promoted in Yumbe (Bidi bidi refugee community) and karamoja to enable increased productivity.; 10 acres for breeder and 18 acres for foundation seed production managed. 626 Tricots, & 75 OTFs, 40 FGs, 22 Demos, being operated, and 79.6 acres of improved varities of cassava (62.6 acres) and sweetpoto (17 acres) established and being maintained (cassava varieties: UG120193, UG120156, Mkumba & NAROCASS1); (sSweetpotato varietes: NKB 216, NKB 135, NASPOT 8 and NAROSPOT 1) |
| 15 Agriculture Research Innovations and IPs commercialized 12 public-private partnerships established for technology development and promotion 8 Agricultural research platforms established 19 improved technologies and innovations adapted | Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported in the production of production and marketing of seed grain and bean derived products. |

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|-------------|
| 221009 Welfare and Entertainment | 3,500.000 |
| 224003 Agricultural Supplies and Services | 20,000.000 |
| 224011 Research Expenses | 76,500.000 |
| Total For Budget Output | 100,000.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 100,000.000 |
| Arrears | 0.000 |
| AIA | 0.000 |
| Total For Department | 246,470.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 246,470.000 |
| Arrears | 0.000 |
| AIA | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|---|--|---|--|
| Department:011 National Fisheries Resources Research Institute | | | |
| Budget Output:010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 4 fish laboratories & 2 aquarium facilities maintained 4 cage research facility maintained 4 vessels and 8 research vehicles maintained | | (i) Incorporated fish species distribution maps for 287 fish species and corresponding shapefiles into the portal. The distribution maps were built using the framework of the International Union for Conservation of Nature (IUCN) for mapping the distribution of freshwater species. Therefore, the maps and shapefiles show the origin (Native, Introduced, and Origin Uncertain) and presence (Extant, Possibly Extant, Possibly Extinct, and Presence Uncertain) of the species (ii) Incorporated into the portal, species summary pages for 16 newly described species (H. concilians, H. erutus, H. planus, H. latifrons, H. rex, H. simba, H. glaucus, H. aquila, H. kimondo, H. falcatus, H. curvidens, H. pardus, H. quasimodo, H. gracilifur, H. molossus, H. relictidens) in Lakes Edward, George and Kazinga channel (iii) Completed an information product to visualise water quality status in national water bodies. maintained one of each fish laboratories, aquarium, cage facility. | |

| | |
|--|---------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | US\$ Thousand |
|--|---------------|

| Item | Spent |
|---|------------|
| 221001 Advertising and Public Relations | 7,546.560 |
| 221007 Books, Periodicals & Newspapers | 3,773.280 |
| 221008 Information and Communication Technology Supplies. | 3,144.400 |
| 221009 Welfare and Entertainment | 5,974.360 |
| 221011 Printing, Stationery, Photocopying and Binding | 5,345.480 |
| 222001 Information and Communication Technology Services. | 10,022.775 |
| 223004 Guard and Security services | 9,433.200 |
| 223005 Electricity | 7,861.000 |
| 223006 Water | 7,861.000 |
| 224011 Research Expenses | 40,248.720 |
| 227004 Fuel, Lubricants and Oils | 11,791.500 |
| 228001 Maintenance-Buildings and Structures | 23,897.440 |
| 228002 Maintenance-Transport Equipment | 7,861.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 8,898.360 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|---|--|---|-------------|
| | | Total For Budget Output | 153,659.075 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 153,659.075 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 freshwater biodiversity portal for Uganda developed 3 georeferenced maps for fish species for Uganda produced 1 Water quality indicator and explorer developed 1 policy brief | | (i) Incorporated fish species distribution maps for 297 fish species and corresponding shapefiles into the portal. The distribution maps were built using the framework of the International Union for Conservation of Nature (IUCN) for mapping the distribution of freshwater species. Therefore, the maps and shapefiles show the origin (Native, Introduced, and Origin Uncertain) and presence (Extant, Possibly Extant, Possibly Extinct, and Presence Uncertain) of the species (ii) Incorporated into the portal, species summary pages for 16 newly described species (H. concilians, H. erutus, H. planus, H. latifrons, H. rex, H. simba, H. glaucus, H. aquila, H. kimondo, H. falcatus, H. curvidens, H. pardus, H. quasimodo, H. gracilifur, H. molossus, H. relictidens) in Lakes Edward, George and Kazinga channel. Technical Report outlining status of water quality, fish parasites and biota at SON cage fish farm. | |
| 4 fish laboratories and 2 aquarium facilities maintained and operationalized, 2 cage research facility maintained and operationalized. 50,000 fish seed (25,000 Labeo and 25,000 Barbus) for the aquaculture industry (hatcheries and lead farmers) | | 1). Maintained 10,000 Nile tilapia and 5000 African catfish F1 generation to be used as quality broodstock (F2 generation) for distribution to private sector and public regional fry centres for seed multiplication; 2).One technology for reduction of anti-nutritional factors in plant-based fish feeds developed; 3). Two (2) novel fish feed formulations for production of cost-effective fish feeds for farmed Nile tilapia from on station trials developed. 4).Ten test formulations of African catfish developed; 5) Acclimatised juvenile african catfish to conduct onstation feeding trials. 6). Initiated the optimisation of one pond production system demonstration site in an identified HPAZs (7) enterprise budgets for production of Nile tilapia and African catfish in ponds and cages in the identified HPAZs in the different AEZs to guide transformation of smallholder farmers into commercial farmers developed. | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|-------------------------|--|-------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | | Spent |
| 224003 Agricultural Supplies and Services | | | 25,300.000 |
| 224011 Research Expenses | | | 12,220.000 |
| 227004 Fuel, Lubricants and Oils | | | 2,700.000 |
| | Total For Budget Output | | 40,220.000 |
| | Wage Recurrent | | 0.000 |
| | Non Wage Recurrent | | 40,220.000 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| | Total For Department | | 193,879.075 |
| | Wage Recurrent | | 0.000 |
| | Non Wage Recurrent | | 193,879.075 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| Department:012 National Forestry Resources Research Institute | | | |
| Budget Output:010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 5 best performing clonal avocado rootstocks determined | | Tools for data collection developed, pretested and digitized. Data collected | |
| 5 trials in avocado growing zones established | | from avocado farmers in central and western regions | |
| 3 Avocado storage and post-harvest euipment developed | | | |
| Avocado oils and seed powder from 10 varieties profiled | | 250 samples collected for growing of root-stocks. | |
| 5 multi-stakeholder innovation platforms | | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | | Spent |
| 221009 Welfare and Entertainment | | | 4,000.000 |
| 221011 Printing, Stationery, Photocopying and Binding | | | 4,400.000 |
| 222001 Information and Communication Technology Services. | | | 1,800.000 |
| 222002 Postage and Courier | | | 400.000 |
| 223001 Property Management Expenses | | | 8,000.000 |
| 223004 Guard and Security services | | | 9,936.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--|---|------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | | Spent |
| 223005 Electricity | | | 16,680.000 |
| 224010 Protective Gear | | | 724.000 |
| 224011 Research Expenses | | | 4,000.000 |
| 227004 Fuel, Lubricants and Oils | | | 12,000.000 |
| 228001 Maintenance-Buildings and Structures | | | 4,000.000 |
| 228002 Maintenance-Transport Equipment | | | 8,000.000 |
| 228004 Maintenance-Other Fixed Assets | | | 4,000.000 |
| Total For Budget Output | | | 77,940.000 |
| Wage Recurrent | | | 0.000 |
| Non Wage Recurrent | | | 77,940.000 |
| Arrears | | | 0.000 |
| AIA | | | 0.000 |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding | a) 4 mother gardens of Shea ethno-varieties conserved in 2 Breeding Seed Orchards maintained | | |
| One cottage industry for Annona developed Value Chain of Annona profiled | b) Existing 7 acres of jack-fruit germplasm bank maintained. | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 110,000 Hass Avocado seedlings produced and extended to famers. | 50,000 high quality Hass avocado plantlets raised from clean roots stocks and scions. | | |
| 110,000 Hass Avocado seedlings produced and extended to famers. | 50,000 high quality Hass avocado plantlets raised from clean roots stocks and scions. | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | | Spent |
| 221001 Advertising and Public Relations | | | 4,329.916 |
| 221007 Books, Periodicals & Newspapers | | | 1,298.976 |
| 222001 Information and Communication Technology Services. | | | 6,494.874 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|---|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | | Spent |
| 224011 Research Expenses | | 32,171.276 |
| | Total For Budget Output | 44,295.042 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 44,295.042 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| | Total For Department | 122,235.042 |
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 122,235.042 |
| | Arrears | 0.000 |
| | AIA | 0.000 |
| Department:013 Mukono Zonal Agriculture Research Institute (ZARDI) | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Two Value added products of tomato and pineapple developed and promoted | Nakati value addition was initiated i.e. Nakati powder was prepared to be used as a fortifier in cassava and wheat flour for making confectionaries; Product development for healthy, nutritious, and tasty beverages was initiated using powder from different spices and blends of avocado seed powder. In addition, making of cosmetics from avocado was initiated and prototypes of oil, soap and jellys were developed. Nakati flavoured confectionery protocols were developed using different quantities of nakati powder to increase its consumability. We also developed the apple pectic extraction protol. This was aimed at developing a cheap natural juice thickener with good digestibility rate | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | | Spent |
| 221011 Printing, Stationery, Photocopying and Binding | | 7,500.000 |
| 222001 Information and Communication Technology Services. | | 3,474.000 |
| 223004 Guard and Security services | | 24,000.000 |
| 223005 Electricity | | 21,000.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--|---|--|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | Spent | |
| 223006 Water | | 3,400.000 | |
| 224011 Research Expenses | | 34,536.000 | |
| 227004 Fuel, Lubricants and Oils | | 6,300.000 | |
| Total For Budget Output | | 100,210.000 | |
| Wage Recurrent | | 0.000 | |
| Non Wage Recurrent | | 100,210.000 | |
| Arrears | | 0.000 | |
| AIA | | 0.000 | |
| Budget Output:010011 Technology Promotion | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 5 technology demonstration established | | A total of 35,000 cuttings were put into the humid chamber/cages of which 13,259 were sorted out and hardened; 8,960 seedlings were sold, 700 seedlings were used to establish a new coffee demonstration and for gap filling at Kamenyamiggo, 3,500 seedlings are still available for sale; 15,000 are still in the cages and not yet hardened | |
| 50,000 coffee and 100,000 cocoa seedlings produced | | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 5 technology demonstration established | | A total of 35,000 cuttings were put into the humid chamber/cages of which 13,259 were sorted out and hardened; 8,960 seedlings were sold, 700 seedlings were used to establish a new coffee demonstration and for gap filling at Kamenyamiggo, 3,500 seedlings are still available for sale; 15,000 are still in the cages and not yet hardened | |
| 50,000 coffee and 100,000 cocoa seedlings produced | | | |
| 5 technology demonstration established | | a) Mother gardens at Ntawo and Kamenyamiggo were maintained by weeding and pruning. b) 700 seedlings were used to establish a new coffee demonstration and for gap filling at Kamenyamiggo. | |
| 50,000 coffee and 100,000 cocoa seedlings produced | | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | Spent | |
| 221001 Advertising and Public Relations | | 7,500.000 | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--------------------|---|-------------|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | US\$ Thousand | |
| Item | | | Spent |
| 221009 Welfare and Entertainment | | | 2,400.000 |
| 222001 Information and Communication Technology Services. | | | 7,945.500 |
| 223001 Property Management Expenses | | | 10,372.000 |
| 224011 Research Expenses | | | 87,564.000 |
| 226001 Insurances | | | 2,000.000 |
| 228001 Maintenance-Buildings and Structures | | | 13,500.000 |
| 228002 Maintenance-Transport Equipment | | | 14,000.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport | | | 6,602.000 |
| 228004 Maintenance-Other Fixed Assets | | | 2,000.000 |
| 273102 Incapacity, death benefits and funeral expenses | | | 6,000.000 |
| Total For Budget Output | | | 159,883.500 |
| | Wage Recurrent | | 0.000 |
| | Non Wage Recurrent | | 159,883.500 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| Total For Department | | | 260,093.500 |
| | Wage Recurrent | | 0.000 |
| | Non Wage Recurrent | | 260,093.500 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| Department:014 National Livestock Resources Research Institute (NaLIRRI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 pasture system mapped & characterized | | 1) 1. A catalog of three months dataset on lameness, milk quality and milk quantity. Data set on live weight estimation based on heart girth assembled from calves. | |
| 1 constraint diagnostic study conducted | | | |
| 200 MT of conserved feed resources | | | |
| 150 Inbred line with different genetic back ground assembled | | 2) 100 MT of conserved forages produced for herd maintenance Six months database on production, nutritional, health, functional and conformation traits assembled; 3) At least 188 Samples sent for genotyping; | |
| 200 Samples for genotyping collected & processed | | | |
| 10 candidate varieties | | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|------------|---|
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | Spent | |
| 221003 Staff Training | 20,000.000 | |
| 221008 Information and Communication Technology Supplies. | 37,700.000 | |
| 221009 Welfare and Entertainment | 12,496.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 7,252.000 | |
| 221012 Small Office Equipment | 21,492.000 | |
| 221017 Membership dues and Subscription fees. | 22,028.000 | |
| 222002 Postage and Courier | 11,448.000 | |
| 223001 Property Management Expenses | 13,000.000 | |
| 223002 Property Rates | 4,498.000 | |
| 223004 Guard and Security services | 40,000.000 | |
| 223005 Electricity | 40,000.000 | |
| 223006 Water | 10,000.000 | |
| 224001 Medical Supplies and Services | 40,000.000 | |
| 224002 Veterinary supplies and services | 10,000.000 | |
| 224003 Agricultural Supplies and Services | 80,500.000 | |
| 224004 Beddings, Clothing, Footwear and related Services | 33,000.000 | |
| 224005 Laboratory supplies and services | 16,000.000 | |
| 224011 Research Expenses | 91,806.000 | |
| 225101 Consultancy Services | 3,000.000 | |
| 226002 Licenses | 7,000.000 | |
| 227001 Travel inland | 5,000.000 | |
| 227004 Fuel, Lubricants and Oils | 2,000.000 | |
| 228001 Maintenance-Buildings and Structures | 42,500.000 | |
| 228002 Maintenance-Transport Equipment | 31,500.000 | |
| 228004 Maintenance-Other Fixed Assets | 20,000.000 | |
| Total For Budget Output | | 622,220.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 622,220.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--|--|---------------|
| | | Total For Department | 622,220.000 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 622,220.000 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| Department:015 National Semi Arid Resources Research Institute (NaSARRI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| Diversity of two crop varieties germplasm (mungbean and sesame) determined | | 15 new cotton lines were planted under 3 agronomic variables (low density, high density and intercropped) at NaSARRI, Tororo, Kasese, Packwach and Lira districts in September-October 2022. | |
| Five cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains, | | Cotton demonstration plots established and maintained in Kasese, Nebbi, Tororo and Serere. Demos maintained and are ready for harvesting next quarter | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | | UShs Thousand |
| Item | | Spent | |
| 224003 Agricultural Supplies and Services | | 3,330.000 | |
| 224011 Research Expenses | | 15,540.000 | |
| 227004 Fuel, Lubricants and Oils | | 2,220.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport | | 1,130.000 | |
| | | Total For Budget Output | 22,220.000 |
| | | Wage Recurrent | 0.000 |
| | | Non Wage Recurrent | 22,220.000 |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| Budget Output:010011 Technology Promotion | | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|---|
| Generation Seed (EGS) produced to promote uptake of technologies through private sector. Technologies for food, nutrition and Industry promoted in 4 Districts located 4 Argo ecological zones | a) Only 5 acres of land planted with breeder seed of BPA 2015A and B. b) 1.5 acres of NAROGRAM2 foundation seed established. |
|---|---|

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | US\$ Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|--------------------|
| 221001 Advertising and Public Relations | 3,000.000 |
| 221007 Books, Periodicals & Newspapers | 5,000.000 |
| 221008 Information and Communication Technology Supplies. | 11,000.000 |
| 221009 Welfare and Entertainment | 5,000.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 3,000.000 |
| 222001 Information and Communication Technology Services. | 1,500.000 |
| 223001 Property Management Expenses | 4,000.000 |
| 223004 Guard and Security services | 9,600.000 |
| 223005 Electricity | 14,400.000 |
| 223006 Water | 4,000.000 |
| 224011 Research Expenses | 22,000.000 |
| 226001 Insurances | 1,000.000 |
| 227004 Fuel, Lubricants and Oils | 6,000.000 |
| 228002 Maintenance-Transport Equipment | 6,000.000 |
| 273102 Incapacity, death benefits and funeral expenses | 4,000.000 |
| Total For Budget Output | 99,500.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 99,500.000 |
| Arrears | 0.000 |
| <i>AIA</i> | 0.000 |
| Total For Department | 121,720.000 |
| Wage Recurrent | 0.000 |
| Non Wage Recurrent | 121,720.000 |
| Arrears | 0.000 |
| <i>AIA</i> | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|------------|--|
| Department:016 Ngetta ZARDI | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 3 new multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed | | Procurement of 3 bags (126kgs) of Serenut 14R, 100kgs of MAKSOY 6N & 25kgs of MAKSOY 3N). 8 acres (3 for groundnuts, 5 for soybean) were prepared for production of Early Generation seed. 8 acres (3 for groundnuts, 5 for soybean) were planted for production of Early Generation seed. |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand |
| Item | Spent | |
| 212103 Incapacity benefits (Employees) | 12,000.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | 2,000.000 | |
| 223006 Water | 7,000.000 | |
| 224003 Agricultural Supplies and Services | 16,000.000 | |
| 224011 Research Expenses | 64,680.000 | |
| 228001 Maintenance-Buildings and Structures | 5,000.000 | |
| 228002 Maintenance-Transport Equipment | 5,000.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport | 5,000.000 | |
| Total For Budget Output | | 116,680.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 116,680.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 116,680.000 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 116,680.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Department:017 Rwebitaba ZARDI | | |
| Budget Output:010010 Technology Generation | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|---|---|---|
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 40,000 clonal plantlets of selected tea clones multiplied. 15 tea clones characterized for biochemical attributes 1000 open pollinated hybrid tea seeds collected | 94 Tea accessions genotyped using DArT technology for diversity and genomic selection purposes. Genomic prediction models for 3 quality parameters of tea training population (300 tea accessions) developed. Work still on-going. | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | US\$ Thousand |
| Item | Spent | |
| 221003 Staff Training | 5,661.932 | |
| 221007 Books, Periodicals & Newspapers | 2,830.968 | |
| 221008 Information and Communication Technology Supplies. | 5,284.472 | |
| 221009 Welfare and Entertainment | 4,718.276 | |
| 221011 Printing, Stationery, Photocopying and Binding | 5,661.932 | |
| 222001 Information and Communication Technology Services. | 6,935.868 | |
| 223001 Property Management Expenses | 10,380.208 | |
| 223004 Guard and Security services | 8,304.168 | |
| 223005 Electricity | 5,661.932 | |
| 223006 Water | 11,323.864 | |
| 224003 Agricultural Supplies and Services | 11,229.500 | |
| 224004 Beddings, Clothing, Footwear and related Services | 3,774.620 | |
| 224011 Research Expenses | 62,493.576 | |
| 226001 Insurances | 1,132.388 | |
| 227004 Fuel, Lubricants and Oils | 16,042.140 | |
| 228001 Maintenance-Buildings and Structures | 4,718.276 | |
| 228002 Maintenance-Transport Equipment | 15,098.488 | |
| 228004 Maintenance-Other Fixed Assets | 6,039.396 | |
| Total For Budget Output | | 187,292.004 |
| Wage Recurrent | | 0.000 |
| Non Wage Recurrent | | 187,292.004 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Department | | 187,292.004 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter | |
|------------------------|---|-------------|
| | Wage Recurrent | 0.000 |
| | Non Wage Recurrent | 187,292.004 |
| | Arrears | 0.000 |
| | AIA | 0.000 |

Development Projects

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

Budget Output:000017 Infrastructure Development and Management

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|---|
| Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed. | Construction at 100% 1) Substructure of queen rearing facility and Goat research facility 3) Construction of Calf/heifer barn at Nakyesasa 4) Civil works at the Milking parlor at Nakyesasa. 5) Hay barn at Nakyesasa, 6) waterborne toilet, 7) Office container units 100% , 8) cattle dip Construction at other % 9) Super-structure of residential staff quarters 10) Research bull-stud at Nakyesasa at 80% completion. 11) Aflasafe plant at Project Progress: Civil works- 95%, Equipment supply & Installation- 15%. 12) Installation of other mechanical fixtures on going. 13) Vaccine production facility Project Progress: 80%, 14) paddocking at 86% (20 fully done, 06 not complete), 15) water reticulation at 85%. 16) Construction of Bullstud –Additional works to support Maruzi. 17) Aflasafe additional works. Project progress: 60% Paddocking system & Farm Access Roads to support Maruzi, a Perimeter Wall & Incinerator at the Vaccine Facility, a Queen Bee Rearing facility to support Maruzi |
| Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed. 1 kilometer of barbed wire fence constructed. | Chain link fence construction done, Construction/ Extension of power line & Reticulation to the Maruzi Farm-Apac. Progress:100%. .. Work on the master plan for ten square miles initiated and still on going. |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

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

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | US\$ Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|--|-------------|
| 312121 Non-Residential Buildings - Acquisition | 405,971.731 |
| Total For Budget Output | 405,971.731 |
| GoU Development | 405,971.731 |
| External Financing | 0.000 |
| Arrears | 0.000 |
| AIA | 0.000 |

Budget Output:010010 Technology Generation

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|--|
| 3MT tons of forage seed produced, 2 high yielding brachiria developed,3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 p | 1) 800 tons of maize silage produced; 3) 150 tons of hay produced. 2) 150 tons of hay (100 acres) produced; 3) 800 tons of maize sillage produced; 3) Nine Months Database on First season performacne of 10 bracharia candidate varieties assembled from 8 locations, and DUS site 4) Database for 20 agronomic & nutritional /sugar biochemical developed; 2) Ensiled 190 samples in laboratory silos; 3) Dry Matter and sugar content of atleast 50 inbredlines determined |
|---|--|

PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|---|--|
| 4 Community Constraint Diagnostic Studies Conducted Development per participating sub-region 1 demo site each on beef, dairy cattle; Goat and pigs established 1 on-farm prediction tool/Model for determination of Pasture productivity developed | Community Constraint Diagnostic Studies Conducted in Nakaseke and Nakasongola. |
|---|--|

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|---|--|---|--|
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 3MT tons of forage seed produced, 2 high yielding brachiria developed,3 low-cost pig feeding packages based on forages and animal waste developed, 10 Forage inbred lines with excellent silage production attributes, and stress tolerance identified. 3F1 p | | 1) 150 tons of hay (100 acres) produced; 3) 800 tons of maize silage produced; 2) Nine Months Database on First season performacne of 10 bracharia candidate varieties assembled from 8 locations, and DUS site 3) Database for 20 agronomic & nutritional /sugar biochemical developed; 2) Ensiled 190 samples in laboratory silos; 3) Dry Matter and sugar content of atleast 50 inbredlines determined | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | Spent | |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | | 283,000.000 | |
| 221003 Staff Training | | 13,000.000 | |
| 221008 Information and Communication Technology Supplies. | | 20,000.000 | |
| 221011 Printing, Stationery, Photocopying and Binding | | 15,000.000 | |
| 222001 Information and Communication Technology Services. | | 24,000.000 | |
| 223004 Guard and Security services | | 7,000.000 | |
| 223005 Electricity | | 15,000.000 | |
| 224003 Agricultural Supplies and Services | | 463,000.000 | |
| 224004 Beddings, Clothing, Footwear and related Services | | 10,000.000 | |
| 224005 Laboratory supplies and services | | 103,000.000 | |
| 224011 Research Expenses | | 302,030.000 | |
| 227003 Carriage, Haulage, Freight and transport hire | | 6,000.000 | |
| 227004 Fuel, Lubricants and Oils | | 214,478.968 | |
| 228001 Maintenance-Buildings and Structures | | 29,000.000 | |
| 228002 Maintenance-Transport Equipment | | 50,000.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | 150,000.000 | |
| Total For Budget Output | | 1,704,508.968 | |
| GoU Development | | 1,704,508.968 | |
| External Financing | | 0.000 | |
| Arrears | | 0.000 | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|---|---|---|---------------|
| Project:1560 Relocation and Operationalisation of the National Livestock Resources Research Institute(NALIRRI) | | | |
| | AIA | | 0.000 |
| | Total For Project | | 2,110,480.699 |
| | GoU Development | | 2,110,480.699 |
| | External Financing | | 0.000 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| Project:1619 Retooling of National Agricultural Research Organization | | | |
| Budget Output:000003 Facilities and Equipment Management | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation | a) Construction of reception at gate, renovation of NARO village, canteen toilets & kitchen at NAROSEC Offices Entebbe. b) Construction of a 19,000 m3 Water Reservoir at Kigumba Farm at Project progress: 40%, Target progress: 100%. c) Construction of Administration block at NARL-Namalere (AEATREC). Project Progress: 100%, Target progress- 100%. d) Renovation of Hostel, Lab & Office Blocks at Abi ZARDI Project Progress: 85%, Target progress- 100%. e) Renovation and Remodeling of Bugusege-Guest House into Residential House (NaCORI). | | |
| Four Agricultural research laboratories of strategic importance equipped 16 Agricultural research Institutes retooled with 24 units of transport equipment to support research 16 Public Agricultural research Institutes retooled with computers | Contract was awarded. Delivery of 50 UPS completed. | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | Spent | |
| 312222 Heavy ICT hardware - Acquisition | | 75,372.471 | |
| 312233 Medical, Laboratory and Research & appliances - Acquisition | | 9,431,844.131 | |
| 312235 Furniture and Fittings - Acquisition | | 19,811.005 | |
| Total For Budget Output | | 9,527,027.607 | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

Project:1619 Retooling of National Agricultural Research Organization

| | |
|--------------------|---------------|
| GoU Development | 9,527,027.607 |
| External Financing | 0.000 |
| Arrears | 0.000 |
| <i>AIA</i> | 0.000 |

Budget Output:010008 Capacity Strengthening

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|--|
| NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of five National laboratories. 10 titles acquired for research land | Staff facilitated to attend longterm and short term skills improvement programmes (tuition fees payment for 2 PhD students, 1 PGD and 1 MSc and Professional Development for 6 Admin Assistants and 19 Procurement Officers) |
|--|--|

Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs *US\$ Thousand*

| Item | Spent |
|--|-------------|
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 64,902.400 |
| 211107 Boards, Committees and Council Allowances | 372,319.250 |
| 221001 Advertising and Public Relations | 31,262.800 |
| 221003 Staff Training | 548,731.841 |
| 221004 Recruitment Expenses | 38,147.500 |
| 221007 Books, Periodicals & Newspapers | 5,570.000 |
| 221008 Information and Communication Technology Supplies. | 116,271.500 |
| 221009 Welfare and Entertainment | 5,000.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 20,571.917 |
| 221012 Small Office Equipment | 2,605.000 |
| 221016 Systems Recurrent costs | 10,650.000 |
| 221017 Membership dues and Subscription fees. | 29,937.010 |
| 222001 Information and Communication Technology Services. | 35,440.081 |
| 223004 Guard and Security services | 992.000 |
| 223005 Electricity | 2,000.000 |
| 224002 Veterinary supplies and services | 3,298.000 |
| 224003 Agricultural Supplies and Services | 10,337.000 |
| 224005 Laboratory supplies and services | 134,791.336 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | Cumulative Outputs Achieved by End of Quarter |
|------------------------|---|
|------------------------|---|

Project:1619 Retooling of National Agricultural Research Organization

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|---------------|
| 224011 Research Expenses | 3,880,364.170 |
| 225101 Consultancy Services | 254,412.448 |
| 225202 Environment Impact Assessment for Capital Works | 30,000.000 |
| 225204 Monitoring and Supervision of capital work | 422,408.400 |
| 226001 Insurances | 804.000 |
| 226002 Licenses | 1,723.000 |
| 227001 Travel inland | 182,172.451 |
| 227004 Fuel, Lubricants and Oils | 195,871.400 |
| 228001 Maintenance-Buildings and Structures | 857,080.549 |
| 228002 Maintenance-Transport Equipment | 59,878.400 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 617.600 |
| Total For Budget Output | 7,318,160.053 |
| GoU Development | 7,318,160.053 |
| External Financing | 0.000 |
| Arrears | 0.000 |
| AIA | 0.000 |

Budget Output:010009 Research Partnerships

PIAP Output: 01040705 Demand driven agriculture technologies developed

Programme Intervention: 010407 Strengthen agricultural research and technology development

| | |
|--|---|
| NNARO annual subscription to four international research organizations maintained for technology generation and transfer for improved production and productivity. | Contribution to International Organizations were made for one international organisation I.e. Biodiversity International (IPGRI). |
|--|---|

| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | UShs Thousand |
|--|---------------|
|--|---------------|

| Item | Spent |
|---|---------------|
| 262201 Contributions to International Organisations-Capital | 1,019,868.958 |
| Total For Budget Output | 1,019,868.958 |
| GoU Development | 1,019,868.958 |
| External Financing | 0.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|---|--|--|---------------|
| Project:1619 Retooling of National Agricultural Research Organization | | | |
| | | Arrears | 0.000 |
| | | AIA | 0.000 |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 35 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 12 research products and services suitable for food Nutrition and industry developed | | 34 agricultural research studies were initiated and principal Investigators were inducted into CGS cohort VI. The research studies will generate information and products for industry conducted under the competitive grants scheme approach. In total, 38% (n=13) of projects are in crops science (pathology, entomology, agronomy, nematology, weed science), 20.6% (n=7) were in livestock and agro-forestry respectively, 8.9% (n=3) in fisheries, 5.9 %(n=2) biochemistry, whereas soil fertility and CGS coordination accounted for 2.9% (n=1) respectively. The studies will cover three sub themes namely: a. Resilient food systems and enhanced nutrition; b. Products for industry and market; c. Resilience to environmental and pandemic phenomena. | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | | UShs Thousand |
| Item | | | Spent |
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | | | 469,630.000 |
| 221001 Advertising and Public Relations | | | 39,520.000 |
| 221003 Staff Training | | | 95,234.500 |
| 221008 Information and Communication Technology Supplies. | | | 46,928.000 |
| 221009 Welfare and Entertainment | | | 1,361.000 |
| 221011 Printing, Stationery, Photocopying and Binding | | | 93,003.000 |
| 221012 Small Office Equipment | | | 7,796.000 |
| 221017 Membership dues and Subscription fees. | | | 1,441.000 |
| 222001 Information and Communication Technology Services. | | | 8,040.000 |
| 222002 Postage and Courier | | | 21,485.308 |
| 223001 Property Management Expenses | | | 1,723.000 |
| 223004 Guard and Security services | | | 1,711.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|-------------------------|---|---------------|
| Project:1619 Retooling of National Agricultural Research Organization | | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | UShs Thousand | |
| Item | | | Spent |
| 223005 Electricity | | | 9,455.000 |
| 223006 Water | | | 1,600.000 |
| 224002 Veterinary supplies and services | | | 77,367.000 |
| 224003 Agricultural Supplies and Services | | | 1,209,126.000 |
| 224004 Beddings, Clothing, Footwear and related Services | | | 459.000 |
| 224005 Laboratory supplies and services | | | 1,283,178.014 |
| 224010 Protective Gear | | | 9,415.000 |
| 224011 Research Expenses | | | 3,532,420.073 |
| 225101 Consultancy Services | | | 167,379.000 |
| 225204 Monitoring and Supervision of capital work | | | 17,228.000 |
| 226001 Insurances | | | 2,871.000 |
| 226002 Licenses | | | 1,852.000 |
| 227001 Travel inland | | | 186,600.000 |
| 227003 Carriage, Haulage, Freight and transport hire | | | 8,964.000 |
| 227004 Fuel, Lubricants and Oils | | | 221,902.000 |
| 228001 Maintenance-Buildings and Structures | | | 63,373.000 |
| 228002 Maintenance-Transport Equipment | | | 76,166.000 |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | | | 29,175.000 |
| 228004 Maintenance-Other Fixed Assets | | | 49,535.800 |
| | Total For Budget Output | | 7,735,938.695 |
| | GoU Development | | 7,735,938.695 |
| | External Financing | | 0.000 |
| | Arrears | | 0.000 |
| | AIA | | 0.000 |
| Budget Output:010011 Technology Promotion | | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter | |
|--|--|--|---------------|
| Project:1619 Retooling of National Agricultural Research Organization | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 5 agricultural research innovations and IPs commercialized 5 multi-stakeholders agricultural research innovation platforms established 9climate-smart technologies demonstrations established in all the ZARDIs 16Public-Private Partnerships established | | 1) At NACRRI. Five bean platforms (Kyazanga, Harriet honest, EADCL, CEDO and Nutreal) supported to produce, market seed grain and bean value added products. At Abi ZARDI, the cassava Multistakeholders innovation platforms strengthened. 3. Fish Multistakeholder Innovation Platforms Strengthened, NARO is building internal capacity for managing and undertaking intellectual property of research innovations. NARO secretariat conducted IP trainings in 5 NARO Institutes NARL, NaCRRI, Ngetta ZARDI, Bulindi ZARDI and Abi ZARDI. What happened and what was achieved, and what outcome? At NARL, NARO expends on efforts to promote two improved technologies, i.e the NARO fish smoking kiln and NARL made Mat-blocks. In the previous financial year, NARO launched the NARO-Fish Smoking Kiln at Kasenyi sites. The performance of 5 fish processing entrepreneurs using the NARO Fish Smoking Kiln in central and eastern region monitored. 2. NARL and Ebenezer company have a working relatielationship. | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | | UShs Thousand |

| Item | Spent |
|--|-------------|
| 211106 Allowances (Incl. Casuals, Temporary, sitting allowances) | 177,192.500 |
| 221001 Advertising and Public Relations | 155,179.718 |
| 221003 Staff Training | 192,452.001 |
| 221007 Books, Periodicals & Newspapers | 7,753.000 |
| 221008 Information and Communication Technology Supplies. | 4,951.000 |
| 221009 Welfare and Entertainment | 115,384.000 |
| 221011 Printing, Stationery, Photocopying and Binding | 74,464.000 |
| 222001 Information and Communication Technology Services. | 78,159.508 |
| 223004 Guard and Security services | 2,182.000 |
| 223005 Electricity | 1,723.000 |
| 224002 Veterinary supplies and services | 11,520.000 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Planned Outputs | | Cumulative Outputs Achieved by End of Quarter |
|--|---------------|---|
| Project:1619 Retooling of National Agricultural Research Organization | | |
| Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs | | US\$ Thousand |
| Item | Spent | |
| 224003 Agricultural Supplies and Services | 972,728.000 | |
| 224005 Laboratory supplies and services | 17,917.000 | |
| 224011 Research Expenses | 2,042,419.150 | |
| 226002 Licenses | 30,831.000 | |
| 227001 Travel inland | 68,727.560 | |
| 227004 Fuel, Lubricants and Oils | 105,964.000 | |
| 228002 Maintenance-Transport Equipment | 13,750.000 | |
| 228003 Maintenance-Machinery & Equipment Other than Transport Equipment | 1,945.000 | |
| 228004 Maintenance-Other Fixed Assets | 1,723.000 | |
| Total For Budget Output | | 4,076,965.437 |
| GoU Development | | 4,076,965.437 |
| External Financing | | 0.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| Total For Project | | 29,677,960.750 |
| GoU Development | | 29,677,960.750 |
| External Financing | | 0.000 |
| Arrears | | 0.000 |
| AIA | | 0.000 |
| GRAND TOTAL | | 80,526,481.887 |
| Wage Recurrent | | 29,853,331.954 |
| Non Wage Recurrent | | 18,740,945.966 |
| GoU Development | | 31,788,441.449 |
| External Financing | | 0.000 |
| Arrears | | 143,762.518 |
| AIA | | 0.000 |

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Quarter 3

Quarter 4: Revised Workplan

| Annual Plans | Quarter's Plan | Revised Plans |
|--|--|--|
| Programme:01 Agro-Industrialization | | |
| SubProgramme:01 | | |
| Sub SubProgramme:01 Agricultural Research | | |
| Departments | | |
| Department:007 NARO-SECRETARIATE | | |
| Budget Output:000001 Audit and Risk Management | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 11 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research. | 2 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research. | 2 audit reports for risk, value for money, systems, assets management, human resource , off budget and competitive Grants scheme reports generated to support management improvement of Agricultural research. |
| Budget Output:000014 Administrative and Support Services | | |
| PIAP Output: 01040701 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Annual subscription for insurance of research vessels, machinery and equipment maintained. 6Public-Private Partnerships established for technology 16 research support infrastructure establishment supported 8 Governing council sessions supported | Annual subscription for insurance of research vessels, machinery and equipment maintained. 1Public-Private Partnership established for technology development and transfer ,1 research support infrastructure establishment supported 8 Governing council sessions supported 4 research supervisory support missions conducted | Annual subscription for insurance of research vessels, machinery and equipment maintained. 1Public-Private Partnership established for technology development and transfer ,1 research support infrastructure establishment supported 8 Governing council sessions supported 4 research supervisory support missions conducted |
| Development Projects | | |
| N/A | | |
| SubProgramme:02 | | |
| Sub SubProgramme:01 Agricultural Research | | |
| Departments | | |
| Department:001 Abi Zonal Agriculture Research Institute(ZARDI) | | |

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Quarter 3

| Annual Plans | Quarter's Plan | Revised Plans |
|--|--|--|
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 13 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 56,000 seedlings of (10,000) Mango, five thousand (5,000) Citrus, Ten thousand (10,000) Avocado | 4 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 14,000 seedlings of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado | 4 Research-extension farmer linkages developed and strengthened, 6 newly released root crop varieties introduced to uptake pathways in the west Nile region, 14,000 seedlings of (2500) Mango, five thousand (1,250) Citrus, Ten thousand (2500) Avocado |
| Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product | 1 highly nutritious composite products one cereal gene bank established One food and one feed product developed | 1 highly nutritious composite products one cereal gene bank established One food and one feed product developed |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Two appropriate tools developed for Tamarind, Shear, Rubber vine and Combratum and 1 management technology Two fish branded nutritive products Two highly nutritious composite products one cereal gene bank established One food and one feed product | 1 highly nutritious composite products one cereal gene bank established One food and one feed product developed | 1 highly nutritious composite products one cereal gene bank established One food and one feed product developed |
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Two functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 2 selected commodities of sorghum and goats in West Nile region | One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 1 selected commodity West Nile region | One functional public private partnerships and platforms established for promotion of Fish and Cassava products and services Market information generated on 1 selected commodity West Nile region |

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Quarter 3

| Annual Plans | | Quarter's Plan | | Revised Plans | |
|--|--|--|--|--|--|
| Budget Output:010011 Technology Promotion | | | | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| Forty-five thousand high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted Two climate resilient and farmer preffered dry land legumes varieties 6 newly released root crop varieties promoted | | 11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preffered dry land legume variety 3 newly released root crop variety promoted | | 11,250 high quality seedlings of citrus, avocado, mango, apples and coffee One soil and water conservation practice promoted 1 climate resilient and farmer preffered dry land legume variety 3 newly released root crop variety promoted | |
| Department:002 Buginyaya Zonal Agriculture Research Institute(ZARDI) | | | | | |
| Budget Output:010008 Capacity Strengthening | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 4 partnerships promoted for technology generation 2 research products commercialized 3 research platforms established | | 1 partnership promoted for technology generation 1 research products commercialized 1 research platform established | | 1 partnership promoted for technology generation 1 research products commercialized 1 research platform established | |
| Budget Output:010010 Technology Generation | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| Four (4) Industrial products for yield improvement and commercialization developed for industry | | 1 Industrial products for yield improvement and commercialization developed for industry | | 1 Industrial products for yield improvement and commercialization developed for industry | |
| Two varieties with adequate resistance to major pests and diseases developed to support house food security and incomes Two packages for sustainable disease management in Arabica coffee and potato developed | | 1 package for sustainable disease management in Arabica coffee and potato developed | | 1 package for sustainable disease management in Arabica coffee and potato developed | |

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| Annual Plans | Quarter's Plan | Revised Plans |
|--|---|---|
| Budget Output: 010010 Technology Generation | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 2 pests resistant varieties 2 disease management packages for strategic crops Generate 25 tons of potato seed 15 adaptive trials, demos 4 Industrial products for yield improvement developed 4 scientific papers published | 1 pests resistant varieties 2 disease management packages for strategic crops Generate 5 tons of potato seed 5 adaptive trials, demos 1Industrial products for yield improvement 1 scientific paper published | 1 pests resistant varieties 2 disease management packages for strategic crops Generate 5 tons of potato seed 5 adaptive trials, demos 1Industrial products for yield improvement 1 scientific paper published |
| Budget Output: 010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | NA |
| Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | 1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | NA |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Four scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | 1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes | 1 scientific papers published to promote and disseminate technologies and innovations for improved nutrition, food security and household incomes |
| 15 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies | 3 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies | 3 adaptive trials, demos and one field day carried out to increase access and utilization of improved technologies |

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Quarter 3

| Annual Plans | Quarter's Plan | Revised Plans |
|---|---|---|
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 0103020112 Agricultural Research platforms established | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted | 2 improved technologies and innovations promoted and adopted 2research products and services for food and nutrition security promoted |
| Department:003 Bulindi Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 2 MSIPs (Soybean and Rice) Initiated to promote technologies 5 crop, 3 livestock and 2 post-harvest handling technologies & practices promoted 5 Climate smart agricultural technologies demonstrated | 1 MSIPs (Soybean and Rice) Initiated to promote technologies 1 crop, 1 livestock and 1 post-harvest handling technologies & practices promoted 1 Climate smart agricultural technologies demonstrated | 1 MSIPs (Soybean and Rice) Initiated to promote technologies 1 crop, 1 livestock and 1 post-harvest handling technologies & practices promoted 1 Climate smart agricultural technologies demonstrated |
| Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed | Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed | NA |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed | Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed | Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed |
| Quality seed for 3 improved priority crop Varieties multiplied and disseminated Information of 3 bee floral resources 2 technology adaptation report on 2 crop technologies developed | Quality seed for 1 improved priority crop Varieties multiplied and disseminated Information of 1 bee floral resources 1 technology adaptation report on 1 crop technologies developed | NA |
| Department:004 Kachwekano Zonal Agriculture Research Institute(ZARDI) | | |

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Quarter 3

| Annual Plans | Quarter's Plan | Revised Plans |
|--|--|--|
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Six technologies promoted for food, nutrition and industry Two technologies for food and nutrition security generated | 3 technologies promoted 1 technologies for food and nutrition security generated | 3 technologies promoted 1 technologies for food and nutrition security generated |
| 8 Demand driven agriculture technologies developed and promoted for food and nutrition security; and industry | 2 demand driven agriculture technologies developed and promoted | 2 demand driven agriculture technologies developed and promoted |
| 8 Demand driven agriculture technologies developed and promoted for food and nutrition; and industry | 2 demand driven agriculture technologies developed and promoted | 2 demand driven agriculture technologies developed and promoted |
| 8 Demand driven agriculture technologies developed and promoted | 2 demand driven agriculture technologies developed and promoted | NA |
| Department:005 Mbarara Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Five technologies for food, nutrition and industry promoted in ten districts of the Zone Two technologies generated for market and Industry 6 Research facilities maintained to support research | 2 technologies for food, nutrition and industry promoted in 2 districts of the Zone 1 technologies generated for market and Industry 3Research facilities maintained to support research | 2 technologies for food, nutrition and industry promoted in 2 districts of the Zone 1 technologies generated for market and Industry 3Research facilities maintained to support research |
| Department:006 Nabuin Zonal Agriculture Research Institute(ZARDI) | | |
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers | 1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers | 1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers |

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Quarter 3

| Annual Plans | Quarter's Plan | Revised Plans |
|--|---|---|
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Seven (07) technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined. | 1 technology for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1biological control strategies on FAW and desert locusts determined. | NA |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Seven (07) technologies for food, Nutrition, income & industry promoted in the zone Efficacy of 2 biological control strategies on FAW & desert locusts determined & Efficacy of 2 biological control strategies on FAW and desert locusts determined. | 1 technology for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1biological control strategies on FAW and desert locusts determined. | 1 technology for food, Nutrition, income & industry promoted in the zone Efficacy of 1 biological control strategies on FAW & desert locusts determined & Efficacy of 1biological control strategies on FAW and desert locusts determined. |
| 4adaptable seed varieties produced and availed to farmers 5technologies of new cereal and two pulse varieties adapted to NEAZ farmers | 1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers | 1 adaptable seed varieties produced and availed to farmers, 1technology of new cereal and 1 pulse varieties adapted to NEAZ farmers |
| Department:007 NARO-SECRETARIATE | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed, | 1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed | 1 Impact report on groundnut and sunflower technologies on the livelihoods and economy of Uganda generated. 1 market study report developed to inform research and farmer enterprise section. 1 NARO work plans FY 2023/2024 & M&E report developed |

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Quarter 3

| Annual Plans | Quarter's Plan | Revised Plans |
|---|--|--|
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 biosecurity access point for the vaccine research facility diverted and maintained as per guidance from from National Council of science and technology for National Bio safety committee, PANVAC and global acceptability for commercialization. | NA | NA |
| Department:008 National Agricultural Research Laboratories | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize 5 Agriculture Research Innovations and IPs commercialized 4 research products and services for food and nutrition s | 1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize developed 1 Agriculture Research Innovations and IPs commercialized 1research products and services for food and nutrition security | 1 animal drawn weeding implement, 1 power tiller weeding implement, 1 low horsepower weeding implement, 1 Aqua Crop guidelines for maize developed 1 Agriculture Research Innovations and IPs commercialized 1research products and services for food and nutrition security |
| Department:009 National Coffee Research Institute | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refi | 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi | NA |

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| Annual Plans | | Quarter's Plan | Revised Plans |
|---|--|--|---------------|
| Budget Output:010008 Capacity Strengthening | | | |
| PIAP Output: 0103020116 Functional public-private partnerships established for technology development and promotion | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 2 Coffee byproducts refine | 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi | 1 alternative pathway for utilization of cocoa waste developed Best-bet coffee system for optimum water use efficiency in Robusta coffee & soil moisture conservation practice for optimum soil moisture stress management developed 1 Coffee byproducts refi | |
| Department:010 National Crops Resources Research Institute | | | |
| Budget Output:010008 Capacity Strengthening | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 10 market-oriented products generated 5 research products and services suitable for industry developed | 4 market-oriented products generated 5 research products and services suitable for industry developed | 4 market-oriented products generated 5 research products and services suitable for industry developed | |
| Budget Output:010011 Technology Promotion | | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 15 Agriculture Research products for food, nutrition and industry promoted along uptake pathways. | 5 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways. | 5 Agriculture Research I products for food, nutrition and industry promoted along uptake pathways. | |
| 15 Agriculture Research Innovations and IPs commercialized 12 public-private partnerships established for technology development and promotion 8 Agricultural research platforms established 19 improved technologies and innovations adapted | 3 Agriculture Research Innovations and IPs commercialized 3 public-private partnerships established for technology development and promotion 2Agricultural research platforms established 5 improved technologies and innovations adapted | 3 Agriculture Research Innovations and IPs commercialized 3 public-private partnerships established for technology development and promotion 2Agricultural research platforms established 5 improved technologies and innovations adapted | |
| Department:011 National Fisheries Resources Research Institute | | | |

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| Annual Plans | Quarter's Plan | Revised Plans |
|---|--|--|
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 4 fish laboratories & 2 aquarium facilities maintained 4 cage research facility maintained 4 vessels and 8 research vehicles maintained | 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained | 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 1 freshwater biodiversity portal for Uganda developed 3 georeferenced maps for fish species for Uganda produced 1 Water quality indicator and explorer developed 1 policy brief | 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained | 1 freshwater biodiversity portal for Uganda developed Capacity of stakeholders strengthened 1 fish laboratories &1 aquarium facilities maintained 1 cage research facility maintained 1 vessels and 2 research vehicles maintained |
| 4 fish laboratories and 2 aquarium facilities maintained and operationalized, 2 cage research facility maintained and operationalized. 50,000 fish seed (25,000 Labeo and 25,000 Barbus) for the aquaculture industry (hatcheries and lead farmers) | 12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers) | 12,500 fish seed (6,250 Labeo and 6,250 Barbus) for the aquaculture industry (hatcheries and lead farmers) |
| Department:012 National Forestry Resources Research Institute | | |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 5 best performing clonal avocado rootstocks determined 5 trials in avocado growing zones established 3 Avocado storage and post-harvest euipment developed Avocado oils and seed powder from 10 varieties profiled 5 multi-stakeholder innovation platforms | 1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled | 1 best performing clonal avocado rootstocks determined 1 trial in avocado growing zones established 1 Avocado storage and post-harvest equipment developed Avocado oils and seed powder from 10 varieties profiled |

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| Annual Plans | | Quarter's Plan | | Revised Plans | |
|---|--|--|--|--|--|
| Budget Output:010010 Technology Generation | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 15 shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona profiled | | 4 Shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona profiled | | 4 Shea ethno-varieties conserved in 2 Breeding Seed Orchards and used as a source of germplasm and breeding One cottage industry for Annona developed Value Chain of Annona profiled | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 110,000 Hass Avocado seedlings produced and extended to famers. | | 27500 Hass Avocado seedlings produced and extended to famers. | | 27500 Hass Avocado seedlings produced and extended to famers. | |
| 110,000 Hass Avocado seedlings produced and extended to famers. | | 27500 Hass Avocado seedlings produced and extended to famers. | | NA | |
| Department:013 Mukono Zonal Agriculture Research Institute (ZARDI) | | | | | |
| Budget Output:010010 Technology Generation | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| Two Value added products of tomato and pineapple developed and promoted | | 2 Value added products of tomato and pineapple developed and promoted | | 2 Value added products of tomato and pineapple developed and promoted | |
| Budget Output:010011 Technology Promotion | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 5 technology demonstration established 50,000 coffee and 100,000 cocoa seedlings produced | | 1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced | | NA | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | |
| 5 technology demonstration established 50,000 coffee and 100,000 cocoa seedlings produced | | 1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced | | 1 technology demonstration established 12,500 coffee and 25,000 cocoa seedlings produced | |

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| Annual Plans | | Quarter's Plan | Revised Plans |
|--|---|---|---------------|
| Budget Output:010011 Technology Promotion | | | |
| PIAP Output: 01040706 Research-extension farmer linkages developed and strengthened | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 5 technology demonstration established | 1 technology demonstration established | 12,500 coffee and 25,000 cocoa seedlings produced | NA |
| 50,000 coffee and 100,000 cocoa seedlings produced | | | |
| Department:014 National Livestock Resources Research Institute (NaLIRRI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| 1 pasture system mapped & characterized | 50 MT of conserved feed resources, 50 Inbred line with different genetic back ground | 50 MT of conserved feed resources, 50 Inbred line with different genetic back ground | |
| 1 constraint diagnostic study conducted | assembled, 50 Samples for genotyping collected & processed, 1 candidate variety developed | assembled, 50 Samples for genotyping collected & processed, 1 candidate variety developed | |
| 200 MT of conserved feed resources | | | |
| 150 Inbred line with different genetic back ground assembled | | | |
| 200 Samples for genotyping collected & processed | | | |
| 10 candidate varieties | | | |
| Department:015 National Semi Arid Resources Research Institute (NaSARRI) | | | |
| Budget Output:010010 Technology Generation | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | |
| Diversity of two crop varieties germplasm (mungbean and sesame) determined | Diversity of 1 crop variety germplasm determined, 1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains, | Diversity of 1 crop variety germplasm determined, 1 cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains, | |
| Five cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains, | | | |

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| Annual Plans | Quarter's Plan | Revised Plans |
|---|--|--|
| Budget Output:010011 Technology Promotion | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| Generation Seed (EGS) produced to promote uptake of technologies. through private sector. Technologies for food, nutrition and Industry promoted in 4 Districts located 4 Argo ecological zones | Generation Seed (EGS) produced to promote uptake of 4 technologies. through private sector. Technologies for food, nutrition and Industry promoted in 1 Districtg located 1 Argo ecological zones | Generation Seed (EGS) produced to promote uptake of 4 technologies. through private sector. Technologies for food, nutrition and Industry promoted in 1 Districtg located 1 Argo ecological zones |
| Department:016 Ngetta ZARDI | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 3 new multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed | 1 New multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed 3 acre | 1 New multiple stress tolerant, high yielding and nutrient dense crop varieties of beans, groundnuts, soybean varieties in different sub ecologies in NAEZ established one most effective propagation protocol for three medicinal plants developed 3 acre |
| Department:017 Rwebitaba ZARDI | | |
| Budget Output:010010 Technology Generation | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 40,000 clonal plantlets of selected tea clones multiplied. 15 tea clones characterized for biochemical attributes 1000 open pollinated hybrid tea seeds collected | 10,000 clonal plantlets of selected tea clones multiplied. 5 tea clones characterized for biochemical attributes ,2500 open pollinated hybrid tea seeds collected | 10,000 clonal plantlets of selected tea clones multiplied. 5 tea clones characterized for biochemical attributes ,2500 open pollinated hybrid tea seeds collected |
| Develoment Projects | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Plans | Quarter's Plan | Revised Plans |
|--|--|--|
| Project:1619 Retooling of National Agricultural Research Organization | | |
| Budget Output:000003 Facilities and Equipment Management | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| 4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation | NA | 4 research laboratories equipped and supplied with consumables to support research. Seven research laboratories maintained Five research laboratories Audited and upgraded towards accreditation |
| Four Agricultural research laboratories of strategic importance equipped 16 Agricultural research Institutes retooled with 24 units of transport equipment to support research 16 Public Agricultural research Institutes retooled with computers | NA | a) Four Agricultural research laboratories of strategic importance equipped b) 16 Agricultural research Institutes retooled with24 units of transport equipment to support research c) 16 Public Agricultural research Institutes retooled with computers. |
| Budget Output:010008 Capacity Strengthening | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of five National laboratories. 10 titles acquired for research land | NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of 1 National laboratories. | NARO human resource capacity strengthened through support to completion of 32 PhDs for research and product development. NARO laboratory management strengthened towards accreditation of 1 National laboratories. |
| Budget Output:010009 Research Partnerships | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | |
| NNARO annual subscription to four international research organizations maintained for technology generation and transfer for improved production and productivity. | NNARO annual subscription to 1 international research organizations maintained | NNARO annual subscription to 1 international research organizations maintained |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| Annual Plans | | | Quarter's Plan | | | Revised Plans | | |
|--|--|--|--|--|--|--|--|--|
| Project:1619 Retooling of National Agricultural Research Organization | | | | | | | | |
| Budget Output:010010 Technology Generation | | | | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | | | | |
| 35 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 12 research products and services suitable for food Nutrition and industry developed | | | 10 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 3 of research products and services suitable for food Nutrition and industry developed | | | 10 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme. 3 of research products and services suitable for food Nutrition and industry developed | | |
| Budget Output:010011 Technology Promotion | | | | | | | | |
| PIAP Output: 01040705 Demand driven agriculture technologies developed | | | | | | | | |
| Programme Intervention: 010407 Strengthen agricultural research and technology development | | | | | | | | |
| 5 agricultural research innovations and IPs commercialized 5 multi-stakeholders agricultural research innovation platforms established 9climate-smart technologies demonstrations established in all the ZARDIs 16Public-Private Partnerships established | | | 3 agricultural research innovations and IPs commercialized, 1multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-Private Partnerships established for technology development and promotion | | | 3 agricultural research innovations and IPs commercialized, 1multi-stakeholders agricultural research innovation platforms established, 2 climate-smart technologies demonstrations established in all the ZARDIs 4 Public-Private Partnerships established for technology development and promotion | | |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

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

Table 4.1: NTR Collections (Billions)

| Revenue Code | Revenue Name | Planned Collection FY2022/23 | Actuals By End Q3 |
|--------------|---|---------------------------------|-------------------|
| 142120 | Sale of Agricultural products and services.-From Private Entities | 0.000 | 0.000 |
| 141541 | Rent & Rates - Non-Produced Assets – from Gov’t units | 0.000 | 0.000 |
| 142119 | Sale of bid documents-From Private Entities | 0.000 | 0.000 |
| Total | | 0.000 | 0.000 |

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Quarter 3

Table 4.2: Off-Budget Expenditure By Department and Project

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

Table 4.3: Vote Crosscutting Issues

i) Gender and Equity

| | |
|------------------------------|--|
| Objective: | Promote gender responsive technologies |
| Issue of Concern: | low agricultural production and productivity, poor storage infrastructure and post harvest management; low value addition; poor market access and low competitive |
| Planned Interventions: | Development, promotion and commercialisation of gender responsive technologies, innovations, information and management practices for improved agricultural production and productivity, |
| Budget Allocation (Billion): | 0.156 |
| Performance Indicators: | Number of Gender responsive technologies (5) generated, promoted and commercialized. |
| Actual Expenditure By End Q3 | |
| Performance as of End of Q3 | |
| Reasons for Variations | |

ii) HIV/AIDS

| | |
|------------------------------|--|
| Objective: | Minimize new infections and protect the positive living |
| Issue of Concern: | High level of new infections of HIV/AIDS |
| Planned Interventions: | NARO shall sensitize staff and improve welfare of positive living staff. |
| Budget Allocation (Billion): | 0.159 |
| Performance Indicators: | Number of staff sensitized |
| Actual Expenditure By End Q3 | 17500000 |
| Performance as of End of Q3 | 100 staff from NAROSEC sensitised about HIV/AIDS |
| Reasons for Variations | |

iii) Environment

| | |
|------------------------------|---|
| Objective: | Develop and promote climate responsive and environmentally friendly technologies |
| Issue of Concern: | Concerns arising from extreme climate variability & their resultant effects like land fragility, landslides, soil erosion, disease epidemics, loss of biodiversity, & the lack of technologies, information, innovations, & environmentally sound practices |
| Planned Interventions: | NARO will strengthen the capacity for NARO institutional biosafety committee (NARO IBC), NARO Institution Animal care use committee to guide environmentally friendly and sound research Preservation and Conservation of national germ plasm |
| Budget Allocation (Billion): | 0.200 |

VOTE: 142 National Agricultural Research Organization (NARO)

Quarter 3

| | |
|------------------------------|---|
| Performance Indicators: | No of interventions (4) by the committees established. No of genetic materials (250) conserved Number of technologies (5) generated and promoted to counter environmental emerging concerns. |
| Actual Expenditure By End Q3 | |
| Performance as of End of Q3 | (i) 8 flow charts revised, developed and displayed in UNGB (ii) 10 acc updated in the Genesys genebank data portal (iii) PGRC website updated and linked to Svalbard Global Seed vault website (iv) Built capacity of 3 genebank staff in knowledge acquired from ICARDA (v) Sensitized 7 personnel from the Ethiopian Institute of Agricultural Research (EIAR) and Students from Green hill academy in Genebanking technologies (vi) Attended a webinar on Creating a Genebank Operation Map organised by Crop Trust (vii) Prepared presentations regarding Landuse (Forest cover, Vegetation & Wetland) trends in Uganda (viii) Documented and shared 15 pictures of EBG for proposal writing. |
| Reasons for Variations | |

iv) Covid

| | |
|------------------------------|--|
| Objective: | Maintain a covid-19 free and healthy workforce and work place (office, laboratory and field and covid1-9 responsive technologies) |
| Issue of Concern: | covid 19 is still a threat that has the potential to disrupt agricultural research system, services, products and research stakeholders. |
| Planned Interventions: | Implement GOU SOPS across Public Agricultural Research Institutes and promotion of technologies which help in the management of Covid 19, while integrating Covid 19 treatment in NARO medical insurance scheme. |
| Budget Allocation (Billion): | 0.350 |
| Performance Indicators: | No of innovations and technologies (2) promoted for the management of Covid 19 |
| Actual Expenditure By End Q3 | 50000000 |
| Performance as of End of Q3 | Purchased an assortment of sanitary supplies |
| Reasons for Variations | |