
Note: 142 National Agricultural Research Organization(NARO)

Department and Projects Annual Workplan Outputs

Programme: 01 AGRO-INDUSTRIALIZATION

SubProgramme: 01 Institutional Strengthening and Coordination

Sub-SubProgramme: 01 Agricultural Research

Department: 007 NARO-SECRETARIATE

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 000014 Administrative and Support Services

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

16 resear

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

16 resear

Total Budget Output Cost(Ushs Thousand): 48,694,859.518

Wage 34,233,229.273

NonWage 14,461,630.245

AIA 0.000

Budget Output: 000001 Audit and Risk Management

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.

Total Budget Output Cost(Ushs Thousand): 180,000.000

Wage 0.000

NonWage 180,000.000

AIA 0.000

Total For Department(Ushs Thousand): 48,874,859.518

Wage 34,233,229.273

NonWage 34,233,229.273

AIA 0.000

SubProgramme: 02 Agricultural Production and Productivity

Sub-SubProgramme: 01 Agricultural Research

Department: 009 National Coffee Research Institute

009 National Coffee Research Institute

Note: 142 National Agricultural Research Organization(NARO)

Workplan Outputs for FY 2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

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

Total Budget Output Cost(Us\$ Thousand): **197,200.000**

Wage 0.000

NonWage 197,200.000

AIA 0.000

Total For Department(Us\$ Thousand): **197,200.000**

Wage 0.000

NonWage 0.000

AIA 0.000

Department: **007 NARO-SECRETARIATE**

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

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

Total Budget Output Cost(Us\$ Thousand): **3,128,925.584**

Wage 0.000

NonWage 3,128,925.584

AIA 0.000

Total For Department(Us\$ Thousand): **3,128,925.584**

Wage 0.000

NonWage 0.000

AIA 0.000

Department: **003 Bulindi Zonal Agriculture Research Institute(ZARDI)**

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

Note: 142 National Agricultural Research Organization(NARO)

Budget Output: 010010 Technology Generation

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

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

Total Budget Output Cost(Ushs Thousand): 166,800.000

Wage 0.000

NonWage 166,800.000

AIA 0.000

Total For Department(Ushs Thousand): 166,800.000

Wage 0.000

NonWage 0.000

AIA 0.000

Department: 004 Kachwekano Zonal Agriculture Research Institute(ZARDI)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

Six technologies promoted

Two technologies for food and nutrition security generated

Six technologies promoted

Two technologies for food and nutrition security generated

Total Budget Output Cost(Ushs Thousand): 191,800.000

Wage 0.000

NonWage 191,800.000

AIA 0.000

Total For Department(Ushs Thousand): 191,800.000

Wage 0.000

NonWage 0.000

AIA 0.000

Department: 005 Mbarara Zonal Agriculture Research Institute(ZARDI)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

Five technologies for food nutrition and industry promoted in ten districts of the Zone

Note: 142 National Agricultural Research Organization(NARO)

Two technologies generated for market and Industry
6 Research facilities maintained to support research

Total Budget Output Cost(Ushs Thousand): **116,800.000**

Wage 0.000

NonWage 116,800.000

AIA 0.000

Total For Department(Ushs Thousand): **116,800.000**

Wage 0.000

NonWage 0.000

AIA 0.000

Department: **006 Nabuin Zonal Agriculture Research Institute(ZARDI)**

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010011 Technology Promotion

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.

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.

Total Budget Output Cost(Ushs Thousand): **116,800.000**

Wage 0.000

NonWage 116,800.000

AIA 0.000

Total For Department(Ushs Thousand): **116,800.000**

Wage 0.000

NonWage 0.000

AIA 0.000

Department: **008 National Agricultural Research Laboratories**

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

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

Total Budget Output Cost(Ushs Thousand): **300,000.000**

Note: 142 National Agricultural Research Organization(NARO)

Wage	0.000
NonWage	300,000.000
AIA	0.000
Total For Department(Ushs Thousand):	300,000.000
Wage	0.000
NonWage	0.000
AIA	0.000

Department: *015 National Semi Arid Resources Research Institute (NaSARRI)*

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

Diversity of two crop varieties germplasm (mungbean and sesame) determined

Five cotton lines resilient to climatic change with high yield potential identified to support the textile industry and related cotton value chains,

Total Budget Output Cost(Ushs Thousand): **22,220.000**

Wage	0.000
NonWage	22,220.000
AIA	0.000

Budget Output: 010011 Technology Promotion

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

Total Budget Output Cost(Ushs Thousand): **100,000.000**

Wage	0.000
NonWage	100,000.000
AIA	0.000

Total For Department(Ushs Thousand): **122,220.000**

Wage	0.000
NonWage	0.000
AIA	0.000

Department: *017 Rwebitaba ZARDI*

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

40,000 clonal plantlets of selected tea clones multiplied.

15 tea clones characterized for biochemical attributes

Note: 142 National Agricultural Research Organization(NARO)

1000 open pollinated hybrid tea seeds collected

Total Budget Output Cost(Ushs Thousand): **191,680.000**

Wage 0.000

NonWage 191,680.000

AIA 0.000

Total For Department(Ushs Thousand): **191,680.000**

Wage 0.000

NonWage 0.000

AIA 0.000

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

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

5 best performing clonal avocado rootstocks determined

5 trials in avocado growing zones established

3 Avocado storage and post-harvest equipment developed

Avocado oils and seed powder from 10 varieties profiled

5 multi-stakeholder innovation platforms est

Total Budget Output Cost(Ushs Thousand): **78,540.000**

Wage 0.000

NonWage 78,540.000

AIA 0.000

Budget Output: 010010 Technology Generation

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

Total Budget Output Cost(Ushs Thousand): **46,460.000**

Wage 0.000

NonWage 46,460.000

AIA 0.000

Total For Department(Ushs Thousand): **125,000.000**

Wage 0.000

NonWage 0.000

AIA 0.000

Department: **011 National Fisheries Resources Research Institute**

Workplan Outputs for FY2022/23

FY2022/23

Note: 142 National Agricultural Research Organization(NARO)

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

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

Total Budget Output Cost(Ushs Thousand): 157,000.000

Wage 0.000

NonWage 157,000.000

AIA 0.000

Budget Output: 010010 Technology Generation

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
3 georeferenced maps for fish species for Uganda produced
1 Water quality indicator and explorer developed
1 policy brief

Total Budget Output Cost(Ushs Thousand): 40,220.000

Wage 0.000

NonWage 40,220.000

AIA 0.000

Total For Department(Ushs Thousand): 197,220.000

Wage 0.000

NonWage 0.000

AIA 0.000

Department: 010 National Crops Resources Research Institute

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

10 market-oriented products generated
5 research products and services suitable for industry developed

Total Budget Output Cost(Ushs Thousand): 147,220.000

Wage 0.000

NonWage 147,220.000

AIA 0.000

Budget Output: 010011 Technology Promotion

Note: 142 National Agricultural Research Organization(NARO)

13 Agriculture research innovations and its commercialized
 12 public-private partnerships established for technology development and promotion
 8 Agricultural research platforms established
 19 improved technologies and innovations adapted

Total Budget Output Cost(Ushs Thousand):	100,000.000
Wage	0.000
NonWage	100,000.000
AIA	0.000
Total For Department(Ushs Thousand):	247,220.000
Wage	0.000
NonWage	0.000
AIA	0.000

Department: 001 Abi Zonal Agriculture Research Institute(ZARDI)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

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
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Total Budget Output Cost(Ushs Thousand):	36,680.000
Wage	0.000
NonWage	36,680.000
AIA	0.000

Budget Output: 010011 Technology Promotion

Forty-five thousand high quality seedlings of citrus, avocado, mango, apples and coffee
 One soil and water conservation practice promoted
 Two climate resilient and farmer preferred dry land legumes varieties
 6 newly released root crop varieties promoted

Total Budget Output Cost(Ushs Thousand):	80,000.000
Wage	0.000
NonWage	80,000.000
AIA	0.000
Total For Department(Ushs Thousand):	116,680.000
Wage	0.000
NonWage	0.000
AIA	0.000

Note: 142 National Agricultural Research Organization(NARO)

Department: 014 National Livestock Resources Research Institute (NaLIRRI)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

1 pasture system mapped & characterized

1 constraint diagnostic study conducted

200 MT of conserved feed resources

150 Inbred line with different genetic back ground assembled

200 Samples for genotyping collected & processed

10 candidate varieties

Total Budget Output Cost(Ushs Thousand): 1,622,220.000

Wage 0.000

NonWage 1,622,220.000

AIA 0.000

Total For Department(Ushs Thousand): 1,622,220.000

Wage 0.000

NonWage 0.000

AIA 0.000

Department: 013 Mukono Zonal Agriculture Research Institute (ZARDI)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

Value added products of tomato and pineapple developed and promoted

Total Budget Output Cost(Ushs Thousand): 101,368.000

Wage 0.000

NonWage 101,368.000

AIA 0.000

Budget Output: 010011 Technology Promotion

5 technology demonstration established

50,000 coffee and 100,000 cocoa seedlings produced

Total Budget Output Cost(Ushs Thousand): 162,532.000

Wage 0.000

NonWage 162,532.000

AIA 0.000

Note: 142 National Agricultural Research Organization(NARO)

Total For Department(Ushs Thousand):	263,900.000
Wage	0.000
NonWage	0.000
AIA	0.000

Department: 002 Buginyaya Zonal Agriculture Research Institute(ZARDI)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010008 Capacity Strengthening

4 partnerships promoted for technology generation
2 research products commercialized
3 research platforms established

Total Budget Output Cost(Ushs Thousand):	130,452.000
Wage	0.000
NonWage	130,452.000
AIA	0.000

Budget Output: 010010 Technology Generation

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
4 scientific papers published

Total Budget Output Cost(Ushs Thousand):	27,771.000
Wage	0.000
NonWage	27,771.000
AIA	0.000

Budget Output: 010011 Technology Promotion

2 improved technologies and innovations promoted and adopted
2 research products and services for food and nutrition security promoted

Total Budget Output Cost(Ushs Thousand):	108,577.000
Wage	0.000
NonWage	108,577.000
AIA	0.000

Total For Department(Ushs Thousand):	266,800.000
Wage	0.000
NonWage	0.000
AIA	0.000

Department: 016 Ngetta ZARDI

Note: 142 National Agricultural Research Organization(NARO)

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

Total Budget Output Cost(Ushs Thousand):	116,680.000
Wage	0.000
NonWage	116,680.000
AIA	0.000
Total For Department(Ushs Thousand):	116,680.000
Wage	0.000
NonWage	0.000
AIA	0.000

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

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

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

Total Budget Output Cost(Ushs Thousand):	2,000,030.000
GoU	2,000,030.000
Ext Fin	0.000
AIA	0.000

Budget Output: 000017 Infrastructure development

Six Livestock research handling infrastructure & 1 production masterplan for ten square miles developed.
1 kilometer of barbed wire fence constructed.

Total Budget Output Cost(Ushs Thousand):	3,861,650.000
GoU	3,861,650.000
Ext Fin	0.000
AIA	0.000
Total For Project(Ushs Thousand):	5,861,680.000
GoU	5,861,680.000
Ext Fin	0.000
AIA	0.000

Note: 142 National Agricultural Research Organization(NARO)

Project: 1619 Retooling of National Agricultural Research Organization

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

35 Agricultural research studies to generate information and products for industry conducted under the competitive grants scheme.
12 of research products and services suitable for food Nutrition and industry developed

Total Budget Output Cost(Ushs Thousand):	10,471,514.000
GoU	10,471,514.000
Ext Fin	0.000
AIA	0.000

Budget Output: 010009 Research Partnerships

NNARO annual subscription to four international research organizations maintained

Total Budget Output Cost(Ushs Thousand):	1,800,000.000
GoU	1,800,000.000
Ext Fin	0.000
AIA	0.000

Budget Output: 010011 Technology Promotion

5 agricultural research innovations and IPs commercialized
5 multi-stakeholders agricultural research innovation platforms established
9 climate-smart technologies demonstrations established in all the ZARDIs
16 Public-Private Partnerships established for

Total Budget Output Cost(Ushs Thousand):	6,605,439.000
GoU	6,605,439.000
Ext Fin	0.000
AIA	0.000

Budget Output: 000017 Infrastructure development

14 agricultural research handling infrastructure established or rehabilitated across public research institutes

Total Budget Output Cost(Ushs Thousand):	16,098,516.712
GoU	16,098,516.712
Ext Fin	0.000
AIA	0.000

Budget Output: 000003 Facilities Management

4 research laboratories equipped and supplied with consumables to support research.
seven research laboratories maintained
Five research laboratories Audited and upgraded towards accreditation

Total Budget Output Cost(Ushs Thousand):	4,333,580.000
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Note: 142 National Agricultural Research Organization(NARO)

GoU	4,333,580.000
Ext Fin	0.000
AIA	0.000

Budget Output: 010008 Capacity Strengthening

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.

Total Budget Output Cost(Ushs Thousand):	6,302,263.850
GoU	6,302,263.850
Ext Fin	0.000
AIA	0.000
Total For Project(Ushs Thousand):	45,611,313.562
GoU	45,611,313.562
Ext Fin	0.000
AIA	0.000

SubProgramme: 03 Storage, Agro-Processing and Value addition

Sub-SubProgramme: 01 Agricultural Research

Department: 008 National Agricultural Research Laboratories

Workplan Outputs for FY2022/23

FY2022/23

Approved Budget, Planned Outputs (Quantity and Location)

Budget Output: 010010 Technology Generation

Three (3) prototypes for processing wet coffee developed
Thirty (30) stakeholder processing capacity quality and PAH-safe smoked fish strengthened, Sixty (60) farmers skilled on using the customized AquaCrop for irrigated maize 5 PAH-safe smoked fish

Total Budget Output Cost(Ushs Thousand):	500,000.000
Wage	0.000
NonWage	500,000.000
AIA	0.000
Total For Department(Ushs Thousand):	500,000.000
Wage	0.000
NonWage	0.000
AIA	0.000