

Vote:110

 Uganda Industrial Research Institute

QUARTER 1: Highlights of Vote Performance

VI: Summary of Issues in Budget Execution

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

	Approved Budget	Cashlimits by End Q1	Released by End Q 1	Spent by End Q1	% Budget Released	% Budget Spent	% Releases Spent
Recurrent Wage	3.720	0.930	0.930	0.930	25.0%	25.0%	100.0%
Non Wage	2.011	0.478	0.478	0.284	23.8%	14.1%	59.4%
Devt. GoU	7.984	1.809	1.809	1.331	22.7%	16.7%	73.6%
Ext. Fin.	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%
GoU Total	13.715	3.217	3.217	2.546	23.5%	18.6%	79.1%
Total GoU+Ext Fin (MTEF)	13.715	3.217	3.217	2.546	23.5%	18.6%	79.1%
Arrears	0.045	0.000	0.000	0.000	0.0%	0.0%	0.0%
Total Budget	13.760	3.217	3.217	2.546	23.4%	18.5%	79.1%
A.I.A Total	0.256	0.070	0.070	0.044	27.5%	17.2%	62.4%
Grand Total	14.016	3.288	3.288	2.589	23.5%	18.5%	78.8%
Total Vote Budget Excluding Arrears	13.971	3.288	3.288	2.589	23.5%	18.5%	78.8%

Table V1.2: Releases and Expenditure by Program*

Billion Uganda Shillings	Approved Budget	Released	Spent	% Budget Released	% Budget Spent	%Releases Spent
Program: 1804 Industrial Research	13.97	3.29	2.59	23.5%	18.5%	78.8%
Total for Vote	13.97	3.29	2.59	23.5%	18.5%	78.8%

Matters to note in budget execution

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

<i>(i) Major unspent balances</i>	
Programs , Projects	
Program 1804 Industrial Research	
0.194 Bn Shs	<i>SubProgram/Project :01 Headquarters</i>
Reason: The variation is immaterial according to the Accounting Principle of Materiality	
<i>Items</i>	
168,676,500.000 UShs	213004 Gratuity Expenses
Reason: To be paid semiannually	
13,184,572.000 UShs	213001 Medical expenses (To employees)

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	Reason: To be paid to staff on reimbursement basis on special approval
4,735,001.000 UShs	221001 Advertising and Public Relations
	Reason: The variation is immaterial according to the Accounting Principle of Materiality The variation is immaterial according to the Accounting Principle of Materiality
3,500,000.000 UShs	222001 Telecommunications
	Reason: The variation is immaterial according to the Accounting Principle of Materiality
2,000,000.000 UShs	213002 Incapacity, death benefits and funeral expenses
	Reason: The variation is immaterial according to the Accounting Principle of Materiality
0.478 Bn Shs	<i>SubProgram/Project :0430 Uganda Industrial Research Institute</i>
	Reason: As per item explanation
<i>Items</i>	
162,132,650.000 UShs	312202 Machinery and Equipment
	Reason: Pending amount to BOU for opening LCs
115,121,023.000 UShs	224006 Agricultural Supplies
	Reason: To be paid upon delivery of procured items
47,179,811.000 UShs	211102 Contract Staff Salaries (Incl. Casuals, Temporary)
	Reason: Was pending payment of 5% due to NSSF upon reconciliation
28,564,000.000 UShs	224004 Cleaning and Sanitation
	Reason: Requisition on IFMS system pending processing approval
16,172,140.000 UShs	312101 Non-Residential Buildings
	Reason: Requisition on IFMS system pending processing approval
<i>(ii) Expenditures in excess of the original approved budget</i>	

V2: Performance Highlights

Table V2.1: Programme Outcome and Outcome Indicators*

Programme : 04 Industrial Research			
Responsible Officer: Prof. Charles Kwesiga			
Programme Outcome: Industrial Product Development and Technological Advancement			
Sector Outcomes contributed to by the Programme Outcome			
1. More technologies adopted			
1. Increased technological and science uptake in development			
Programme Outcome Indicators	Indicator Measure	Planned 2018/19	Actuals By END Q1
Number of Research Innovations developed	Number	5	3
Number of developed and transferred Technologies utilized	Number	6	2

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Cumulative Number of Sustainable Model Value Addition Centers and Technical Business Incubation Enterprises	Number	4	2
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Table V2.2: Key Vote Output Indicators*

Performance highlights for the Quarter

V3: Details of Releases and Expenditure

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

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
Program 1804 Industrial Research	13.76	3.22	2.55	23.4%	18.5%	79.1%
<i>Class: Outputs Provided</i>	<i>11.51</i>	<i>2.78</i>	<i>2.30</i>	<i>24.1%</i>	<i>20.0%</i>	<i>82.9%</i>
180401 Administration and Support Services	5.73	1.41	1.21	24.6%	21.2%	86.2%
180402 Research and Development	3.48	0.85	0.75	24.5%	21.6%	88.2%
180403 Industrial and technological Incubation	0.75	0.23	0.15	30.3%	20.0%	66.0%
180404 Model Value Addition Centre Establishment	0.31	0.06	0.06	18.0%	18.0%	100.0%
180405 Facility Repair and Maintenance	0.40	0.01	0.00	3.0%	0.0%	0.0%
180406 Industrial Skills Development and Capacity Building	0.18	0.07	0.01	38.7%	5.0%	13.0%
180407 Technology, Innovation, Transfer and Development	0.51	0.11	0.10	22.0%	19.1%	87.0%
180408 Popularization of research and technologies	0.15	0.04	0.02	26.1%	15.3%	58.4%
<i>Class: Capital Purchases</i>	<i>2.21</i>	<i>0.44</i>	<i>0.25</i>	<i>20.0%</i>	<i>11.1%</i>	<i>55.5%</i>
180472 Government Buildings and Administrative Infrastructure	1.11	0.10	0.08	9.0%	7.5%	83.8%
180476 Purchase of Office and ICT Equipment, including Software	0.07	0.01	0.01	14.3%	14.3%	100.0%
180477 Purchase of Specialised Machinery & Equipment	1.02	0.33	0.15	32.3%	14.8%	45.7%
<i>Class: Arrears</i>	<i>0.04</i>	<i>0.00</i>	<i>0.00</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>
180499 Arrears	0.04	0.00	0.00	0.0%	0.0%	0.0%
Total for Vote	13.76	3.22	2.55	23.4%	18.5%	79.1%

Table V3.2: 2018/19 GoU Expenditure by Item

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
<i>Class: Outputs Provided</i>	<i>11.51</i>	<i>2.78</i>	<i>2.30</i>	24.1%	20.0%	82.9%
211102 Contract Staff Salaries (Incl. Casuals, Temporary)	5.07	1.27	1.22	25.0%	24.1%	96.3%
211103 Allowances	0.08	0.02	0.01	19.0%	11.1%	58.5%
212101 Social Security Contributions	0.51	0.13	0.11	25.0%	22.1%	88.5%
213001 Medical expenses (To employees)	0.80	0.36	0.34	45.0%	42.8%	95.1%
213002 Incapacity, death benefits and funeral expenses	0.02	0.00	0.00	13.2%	0.0%	0.0%
213004 Gratuity Expenses	1.27	0.17	0.00	13.3%	0.0%	0.0%
221001 Advertising and Public Relations	0.02	0.01	0.00	46.7%	15.1%	32.4%

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221003 Staff Training	0.11	0.03	0.03	28.4%	28.1%	98.7%
221004 Recruitment Expenses	0.01	0.00	0.00	0.0%	0.0%	0.0%
221005 Hire of Venue (chairs, projector, etc)	0.07	0.01	0.00	10.8%	0.0%	0.0%
221009 Welfare and Entertainment	0.10	0.04	0.04	38.2%	38.2%	100.0%
221011 Printing, Stationery, Photocopying and Binding	0.08	0.03	0.02	36.8%	24.3%	65.9%
221012 Small Office Equipment	0.01	0.00	0.00	10.0%	8.9%	88.7%
221017 Subscriptions	0.02	0.00	0.00	0.0%	0.0%	0.0%
222001 Telecommunications	0.02	0.01	0.00	33.3%	10.0%	30.0%
222002 Postage and Courier	0.01	0.00	0.00	0.0%	0.0%	0.0%
222003 Information and communications technology (ICT)	0.15	0.03	0.01	17.0%	9.5%	56.1%
223001 Property Expenses	0.03	0.00	0.00	15.6%	14.5%	93.5%
223002 Rates	0.00	0.00	0.00	0.0%	0.0%	0.0%
223004 Guard and Security services	0.14	0.03	0.02	22.2%	12.6%	56.9%
223005 Electricity	0.95	0.23	0.23	24.6%	24.6%	100.0%
223006 Water	0.17	0.04	0.04	21.8%	21.8%	100.0%
223007 Other Utilities- (fuel, gas, firewood, charcoal)	0.13	0.00	0.00	0.0%	0.0%	0.0%
224004 Cleaning and Sanitation	0.10	0.03	0.00	30.3%	0.5%	1.5%
224005 Uniforms, Beddings and Protective Gear	0.05	0.01	0.00	9.6%	0.0%	0.0%
224006 Agricultural Supplies	0.45	0.13	0.01	28.7%	3.1%	10.9%
226001 Insurances	0.05	0.00	0.00	0.0%	0.0%	0.0%
227001 Travel inland	0.05	0.01	0.01	23.4%	21.3%	90.9%
227002 Travel abroad	0.13	0.07	0.07	56.5%	56.5%	100.0%
227003 Carriage, Haulage, Freight and transport hire	0.01	0.00	0.00	0.0%	0.0%	0.0%
227004 Fuel, Lubricants and Oils	0.12	0.03	0.03	25.0%	25.0%	100.0%
228001 Maintenance - Civil	0.15	0.00	0.00	0.0%	0.0%	0.0%
228002 Maintenance - Vehicles	0.22	0.06	0.05	27.6%	25.2%	91.2%
228003 Maintenance – Machinery, Equipment & Furniture	0.46	0.05	0.04	10.8%	7.6%	70.6%
Class: Capital Purchases	2.21	0.44	0.25	20.0%	11.1%	55.5%
281502 Feasibility Studies for Capital Works	0.08	0.00	0.00	0.0%	0.0%	0.0%
312101 Non-Residential Buildings	1.03	0.10	0.08	9.7%	8.1%	83.8%
312202 Machinery and Equipment	0.65	0.30	0.14	45.8%	21.1%	46.0%
312203 Furniture & Fixtures	0.02	0.01	0.01	49.5%	34.4%	69.5%
312213 ICT Equipment	0.07	0.01	0.01	14.3%	14.3%	100.0%
312214 Laboratory Equipments	0.35	0.02	0.01	6.1%	1.9%	30.3%
Class: Arrears	0.04	0.00	0.00	0.0%	0.0%	0.0%
321614 Electricity arrears (Budgeting)	0.04	0.00	0.00	0.0%	0.0%	0.0%
Total for Vote	13.76	3.22	2.55	23.4%	18.5%	79.1%

Table V3.3: GoU Releases and Expenditure by Project and Programme*

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% GoU Budget Released	% GoU Budget Spent	%GoU Releases Spent
Program 1804 Industrial Research	13.76	3.22	2.55	23.4%	18.5%	79.1%
<i>Recurrent SubProgrammes</i>						

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01 Headquarters	5.78	1.41	1.21	24.4%	21.0%	86.2%
<i>Development Projects</i>						
0430 Uganda Industrial Research Institute	7.98	1.81	1.33	22.7%	16.7%	73.6%
Total for Vote	13.76	3.22	2.55	23.4%	18.5%	79.1%

Table V3.4: External Financing Releases and Expenditure by Sub Programme

<i>Billion Uganda Shillings</i>	Approved Budget	Released	Spent	% Budget Released	% Budget Spent	%Releases Spent
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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
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Program: 04 Industrial Research
Recurrent Programmes
Subprogram: 01 Headquarters
Outputs Provided
Output: 01 Administration and Support Services

		Item	Spent
Recruit new staff	Recruited 10 new employees, 5 male and 5 female from the different regions of the country	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	930,038
Provide Medical Insurance to staff and there dependants	Paid up Medical Insurance for all UIRI employees and there dependents	212101 Social Security Contributions	93,004
Insure Institute Assets, Equipment, Vehicle, IT servers and IT equipment	Paid up insurance dues for UIRI Assets, Equipment, Vehicles, and ICT equipments.	213001 Medical expenses (To employees)	116,815
Provide institute utilities	Paid Institute Utilities - Water, Electricity, Telephone and Connectivity	221001 Advertising and Public Relations	2,265
Pay Staff Salaries and Benefits	Paid all staff salaries and benefits on time	221003 Staff Training	10,000
Pay subscriptions to professional bodies	Paid off subscriptions dues to respective bodies	221009 Welfare and Entertainment	20,644
Facilitate general operations for day to day running of the Institute	Facilitated the general operations of UIRI day to day running of the Institute	221012 Small Office Equipment	887
		222001 Telecommunications	1,500
		222003 Information and communications technology (ICT)	3,446
		223001 Property Expenses	3,925
		223005 Electricity	28,759
		223006 Water	17,500
		227001 Travel inland	5,485
		227002 Travel abroad	23,000
		227003 Carriage, Haulage, Freight and transport hire	1,067

Reasons for Variation in performance

N/A

Pending are electricity arrears

Total	1,258,335
Wage Recurrent	930,038
Non Wage Recurrent	284,356
AIA	43,941
Total For SubProgramme	1,258,335
Wage Recurrent	930,038
Non Wage Recurrent	284,356
AIA	43,941

Development Projects
Project: 0430 Uganda Industrial Research Institute
Outputs Provided
Output: 02 Research and Development

		Item	Spent
Provide Laboratory Analytical services and Advisory Services Provide high-quality, internationally accepted, verifiable and timely analytical services,	8 Lactic Acid and Bioplastics (polylactide) production from cassava: Value addition to starch root tuber crops • The project addresses the development	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	290,320

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

to enable manufacturers' meet business and quality goals in a competitive way. Develop, Manufacture and Distribute Priority First Line Livestock Vaccines Increase production of competitive local products for domestic consumption and exportEstablishment of an Essential Oil Sector	of a production process for lactic acid from cassava by fermentation using Lactobacillus casei strain isolated from the gut of a child • UIRI is optimizing the production process to determine the right cassava weight to start with and how much water to add and inoculum • UIRI is also developing a process for concentration of the usually very dilute lactic acid to the level it is normally sold • Development of separation and purification processes were ongoing • Once the lactic acid is produced at the right concentration UIRI will polymerize the lactic acid into polylactide for making bio-plastics • Production of bioplastic from the polymerized lactic acid(delayed) 9. Production of Bioethanol from Cassava • Production process is being developed together Future Ventures Ltd a company owned by two people Martin and Owilli George Malted sorghum, maize and green gram Made the ethanol using Saccharomyces cerevisiae Failed to distil to determine the ethanol content because we didn't have an operational distillation unit. The product is still in the laboratory. The client went back to Abim in Karamoja waiting for us to get equipment. I have sent out a request for quotation but nobody has responded yet 19. UIRI analyzed 120 laboratory samples for chemical composition & certificates issued. These included External and Internal laboratory samples, for; food, juice, water & waste water, drugs, minerals, soap, Detergents, alcoholic beverages, cosmetics, plants, natural products and petroleum products 20. Analyzed 53 samples for microbial analysis 21. UIRI participated in the proficiency tests which we performed very well and the Z-score was excellent 22. Cosmetics, soap and detergents and toiletries i. Cow Ghee Project UIRI using cow ghee was being used to make cosmetics: Ghee-Body Cream, Ghee-Body Lotion, Ghee-Hair Food, Ghee-Lip Balm & Ghee-Toilet soap? The mentioned products were stable on the shelves and standardization was on-going. The project is still at a laboratory scale ii. Avocado oil project Avocado oil was produced and analyzed in the chemistry	212101 Social Security Contributions	19,121
		213001 Medical expenses (To employees)	225,635
		221003 Staff Training	15,000
		221009 Welfare and Entertainment	30,000
		222003 Information and communications technology (ICT)	10,592
		223004 Guard and Security services	17,060
		223005 Electricity	77,219
		223006 Water	6,000
		224004 Cleaning and Sanitation	436
		227002 Travel abroad	30,000
		227004 Fuel, Lubricants and Oils	10,000
		228002 Maintenance - Vehicles	19,954

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

laboratory. Standardization work was on-going). The project is still at a laboratory scale

iii. Development of Guava leaf extract and Mango butter-based hair products: Hair Shampoo, 2- Conditioning Leave-in Mask, 3-Hair Spray, 4-Hair Food
The mentioned product formulation prototypes were developed and the project is still at a laboratory scale

1. BRENTec / Vaccine Production Unit produced 3,000,000 doses of Newcastle Vaccine with total Sales of 2,116,000 doses and 1,027,000 doses to specifically Smallholder farmers. Estimated Households Reached at Small Holder Level are 16,500 households

2. Hardware design and analysis, Firmware design, simulation and prototyping was ongoing for the: Automatic indoor/outdoor Lighting System; Solar Fruit Dryer; Keypad based door lock system; Solar Powered Egg incubator; Weighing Scale; Automatic Voltage Regulator; Multi-purpose Temperature control monitoring; Fingerprint and pin code based security access control system; team oriented projects, electronic components were received, however, they will need to be replenished as prototyping, hardware and software integration continues.

20. The following subscriptions were paid

i. Agricultural Laboratory Association of Southern Africa (AgriLASA)

ii. South Africa Development Committee for Measurement and Traceability and SADC MET pts as required for Accreditation of the Chemistry Laboratory.

3. Commenced on method Validation for Vitamin A in oil & Flour using HPLC

4. 4 Research projects under Chemistry Laboratory were ongoing

i. Antimicrobial activity of banana flowers extract against bacteria

ii. Application of zeolites in removal of heavy metals in wastewater.

iii. Antimicrobial and anti-oxidant studies of essential oils from exotic plants

iv. Formulation of sensitizers from aloe vera

5. Lactic Acid and Bioplastics

(polylactide) production from cassava: Value addition to starch root tuber crops

- The project addresses the development of a production process for lactic acid from cassava by fermentation using *Lactobacillus casei* strain isolated from the gut of a child

- UIRI is optimizing the production

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

process to determine the right cassava weight to start with and how much water to add and inoculum

- UIRI is also developing a process for concentration of the usually very dilute lactic acid to the level it is normally sold
 - Development of separation and purification processes were ongoing
 - Once the lactic acid is produced at the right concentration UIRI will polymerize the lactic acid into polylactide for making bio-plastics
 - Production of bioplastic from the polymerized lactic acid(delayed)
6. Production of Bioethanol from Cassava

- Production process is being developed together Future Ventures Ltd a company owned by two people Martin and Owilli George

Malted sorghum, maize and green gram
Made the ethanol using *Saccharomyces cerevisiae*
Failed to distil to determine the ethanol content because we didn't have an operational distillation unit. The product is still in the laboratory. The client went back to Abim in Karamoja waiting for us to get equipment. I have sent out a request for quotation but nobody has responded yet

7. Materials for manufacturing of 5 prototypes for the ECG Fand Clinical testing consumables were procured¹⁰.
UIRI established semi commercial essential oil pilot plots with emphasis on Rose geranium and lemon balm.

11. Perfumes and essential oils
- Two clients wan UIRI to develop with them perfumes and essential oils products. We are waiting for them to procure their own raw materials
- Trained incubatee (Ms. Fatuma Balinda) in perfume formulation from the biotechnology laboratory
Have taken the client through the theoretical part of perfume formulation, reagents and ingredients required
The client is in the process of purchasing raw materials to start practical hands on perfume production
- Formulation of non-alcoholic mouthwash for Dr. Ocheng Francis from Mengo Hospital Dental Unit and Makerere University Medical School Dental Unit.
- Have done literature search and come up with a list of raw materials required and the client has already procured the raw materials
12. In vitro assessment of antibacterial

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

activity of selected plant ethanolic extracts against Streptococcus pneumonia

i. Project research was completed and awaiting for funds to disseminate the results to the innovator in Kamuli district and develop a production process for making the herbal remedy which we verified as being efficacious

13. Yoba for Life project is undet implementing in collaboration with Heifer International. UIRI's role is distribution of inoculum and training clients in Kampala how to make the yogurt starter cultures

14. The mushroom sausage was still under development, it has not yet reached the commercial stage

15. 5 staff from Instrumentation Division to participate in 2nd Uboru Design School in Italy

16. Kick started clinical and medical equipment assessment in 3 regions of Uganda with meeting and conferences

17. Materials for prototype development of the Portable Neonate Warmer (PNW) and the Wendi tracking device were procured

18. Medical device standards, software, project dissemination costs were incurred

Reasons for Variation in performance

1. Equipment is at the end of its product life cycle and is prone to malfunctioning
2. Lack of funds to improve market access of vaccine distribution in other parts of the country

1. Unpaid subscriptions include Online Membership subscription for:
 - iii. Proficiency Testing Scheme (PTA)
 - iv. AOAC (Association of Analytical Chemists),
 - v. American Public Health Association,
 - vi. Science Direct Journal
 - vii. South African Journal of Chemistry (SAJC).
 - viii. Fondo Para La Proteccion de los Animales Salvajes (FAPAS)
 - ix. African Journal of Pure and Applied Chemistry (AJPAC).

N/A

Total	751,337
GoU Development	751,337
External Financing	0
AIA	0

Output: 03 Industrial and technological Incubation

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Establish a strong MSME and Industrial sector	1. BRENTec / Vaccine Production Unit produced 3,000,000 doses of Newcastle Vaccine with total Sales of 2,116,000 doses and 1,027,000 doses to specifically Smallholder farmers. Estimated Households Reached at Small Holder Level are 16,500 households 2. Established semi commercial essential oil pilot plots with emphasis on Rose geranium and lemon balm. 3. Incubatees under Meat Technology produced 47,879 Kilos of Processed Meat 4. Two local entrepreneurs undertook capacity building in utilization of distilled essential oils and floral water 5. Procured equipment to scale up the Biofuel production unit 6. Drafted a concept note for optimization of bioethanol productivity using locally available yeast strains 7. Sized and installed a functional solar system at Kabale Vocational Institute whose location is off the electricity grid 8. Energy Systems Division fabricated briquette machines and conducted training from 18th to 21st September, 2018 on briquette production using crop biomass as part of a project implemented by the Faculty of Agriculture and Environment, Gulu University on rice value chain in Northern Uganda. 9. Produced books covers from waste paper 10. Produced absorbent Paper - 150 samples made awaiting testing 11. Incubated 15 female and 6 male in handmade paper production from the areas of Luweero and Kampala	Item	Spent
		211103 Allowances	8,768
		221003 Staff Training	14,611
		223005 Electricity	30,000
		223006 Water	12,000
		224006 Agricultural Supplies	5,020
		227001 Travel inland	4,170
		227002 Travel abroad	20,000
		227004 Fuel, Lubricants and Oils	20,000
		228002 Maintenance - Vehicles	34,786

Reasons for Variation in performance

- Fowl Pox Vaccine and Gumboro Vaccine Development did not commence due to insufficient funds
- Vaccine Production Equipment is at the end of its product life cycle and is prone to malfunctioning
- Lack of funds to improve market access of vaccine distribution in other parts of the country
- Most training applicants failed to turn up for training because they were unable to fund their training.
- BMFL Stopped production due to financial constraints
- Sante Production is irregular due to limited working capital
- Arua Nile Natural Ltd is currently not in production due to lack of power connectivity
- The Milk Powder Plant is in a very dilapidated state. It needs urgent renovation. The roof and floors are leaking; rust is eating away the plates posing his risk for people working in this plant
- Dairy Equipment maintenance: Frequent breakdown of ageing equipment and machinery in the Dairy Pilot Plants – Requires allocation of funds for execution of a comprehensive Equipment maintenance Program. Old obsolete equipment and machinery need to be replaced with new efficient equipment and machinery especially in the yoghurt and ice cream plant. Adequate spare parts need to be stocked- for preventive maintenance, scheduled repairs and economic maintenance
- Remodelling of the food pilot plants is urgently required as some of the floor and wall tiles are broken and need urgent repair to ensure compliance with food safety and regulatory requirements

Total 149,355

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
		GoU Development	149,355
		External Financing	0
		AIA	0

Output: 04 Model Value Addition Centre Establishment

Regional Rural Industrialization	During the quarter the following were achieved	Item	Spent
	1. 100% completion of the ATCG offices at formerly occupied UNBS premises at UIRI Campus. Monitoring the performance of the building during the defects liability period.	223005 Electricity	45,000
	2. 100% completion of valuation and boundary opening of Land and buildings on Plot 42 Mukabya Road, belonging to UIRI Project. The Valuation Report was submitted by the consultants.	223006 Water	10,000
	3. 60% completion and doors at the Silk Processing Line Facility in Sheema district were installed		
	4. 50% completion of the construction of sub-structural works and casting of the floor slab for the container platform for Wine Production.		
	5. Proposed Sanitary Napkin Production Facility is at design stage		
	6. Completed processing of Leasehold Titles for plots 461 & 3739, block 113, Kyagwe, Namanve for the Machining, manufacturing and Industrial Skills Training Center Namanve		
	7. Purchased materials to complete Epoxy Floor Finish for the Palm Oil Facility in Kanungu		
	8. Completed the design and cost estimate for the Tile Manufacturing Facility in Wakiso		
	9. Completed the Internal plastering works and rendering to external walls for Animal Feeds Facility in Busiika		

Reasons for Variation in performance

Need for Innovation Fund and Commercialization Fund

Total	55,000
GoU Development	55,000
External Financing	0
AIA	0

Output: 06 Industrial Skills Development and Capacity Building

Provide Industrial training	1. Trained 111 people (15 in Cosmetics production and 96 in Soap, Detergents, & Toiletries production) of which 45 were Females and 66 were Male majorly from the Central and western regions	Item	Spent
Provide Internship Train entrepreneurs' in production and processing skills	2. Trained 7 students from Uganda	224006 Agricultural Supplies	9,120

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

- Petroleum Institute Kigumba various aspects of mechanical engineering and maintenance
3. Trained 7 students from KYU, MAK, NVTI in electrical engineering and maintenance
 4. Trained 2 students from NVTI in carpentry
 5. Trained 24 students from Gulu University in briquette production
 6. Trained 9 students and 5 graduate students in tailoring, Garment and product construction.
 7. Trained 5 university students and 3 community trainees on how to operate the Two Head Flatbed Embroidery Machine
 8. Initiated request for Chemistry Staff training in Good laboratory practice & ISO 17025 basics
 9. Trained Rugiga Youth Development Initiative in Value addition to fruits to make products like juices, jam, wine and electric dried fruits
 10. Trained Uganda Women Entrepreneurship Association (UWEAL) Production of juice and Bushera
 11. Trained 3 male and 1 female in Pineapple juice processing and cocktail juice from the Muslim community
 12. Trained Uganda Martyrs Primary School, Kabale in production of passion juice and pineapple juice
 13. Trained Pamoja Investments in production of passion juice and pineapple juice
 14. Trained Golooba Gilbert of Kawanda Outgrowers in Hot pepper processing
 15. Trained Uganda Martyr's Choir Namugongo Catholic Shrine in production of fruit juice, jam, wine and dried fruits
 16. Trained Kyebajangobora Development Organization in skills of processing jackfruit jam, mango juice, jackfruit juice, dried jackfruit
 17. 2 groups were trained under Meat Technology, with a total number of 14 youth participants, 4 of the participants were female whereas 10 were male.
 18. Trained 36 students of Makerere, Kyambogo, Gulu, Mukono university in Good laboratory practice.
 19. Conducted training of 11 students from tertiary institutions, KYU, MUK, IUIU of 3 male and 8 female in dairy processing focusing on pasteurized Milk, ice cream and Yoghurt production technologies.
 20. Conducted training of 7 male and 21 female that included youth grouped together based on their training needs and

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

desired training period. All the 28 some from Gulu, Ntoroko, Mbale, Luwero and Mukono all trained in dairy processing focusing on dairy products technology Yoghurt, ice cream , pasteurized milk ,and soft cheese, soy milk and soy yoghurt.

21. Trained 17 male and 13 female a total of 30 from Kyotera in probiotic Yoghurt, honey sweetened yoghurt , soy milk ,fruit pulps, soy yoghurt

22. Trained already existing farmers, local persons and groups of people interested in mushroom growing and value addition as an enterprise

23. 5 meat section Incubatees attended a workshop on financing SMEs these included 2 female and 3 were male of which 3 were youth and 2 were elders

24. 5 university students were trained under the ICT and BDC Training in ICT skills: programming, user support, networking, and server administration.

Reasons for Variation in performance

Many people have applied for training in different processing, but most of them are unable to foot the cost of training materials. Funds need to be allocated to facilitate training programs for this category. A few who can provide their training materials continue to be trained
N/A

Total	9,120
GoU Development	9,120
External Financing	0
AIA	0

Output: 07 Technology, Innovation, Transfer and Development

Develop appropriate and affordable technologies Innovate new processes, technologies and industrial solutions	Item	Spent
10. Diverged drain line from pilot plant to wastewater treatment plant Diversion of old blocked drainage line	223005 Electricity	62,500
11. Repaired the leaking main water supply pipe	228003 Maintenance – Machinery, Equipment & Furniture	35,321
12. Connected two top plugs for UPS in Vaccine Laboratory		
13. Replaced a fluorescent tube and damaged choke in Executive Directors’s Office reception		
14. Installed single double sockets in Instrumentation Unit workshop		
15. Replaced a hand dryer in the Yorghut & Ice cream Pilot plant		
16. Carried out, continuity and megger/insulation tests for the Polishing Machine motor in Mechanical workshop		
17. Troubleshoot and rectified the Non starting problem of the Dough Mixer Machine Bakery pilot plant (replaced a damaged cable)		
18. Training of Students from Higher Institutions of Learning in electrical and plumbing maintenance		

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

19. Supplied power line to the Cake Mixer Machine in Bakery pilot plant
20. Daily checks /control and monitoring and cleaning of UIRI Standby generator sets were routinely done
21. Replaced an ordinary double socket with a single phase industrial socket in Mushroom section
22. Installed a single phase industrial socket in PCB Lab for a new machine
23. Dough Mixer Machine Motor rewinding in Bakery Pilot Plant rewound
24. Shearing machine repaired for hydraulic and electro-pneumatic repairs
25. Repaired the cake mixer, filling, machining and adjustment of clutch and gear teeth in the bakery section
26. Replaced 9 drive belts, oil and adjustments of the Bowl Cutter
27. Replaced the Mincer machine gear teeth filling of meat technology
28. Replaced the of worn-out bearings, rubber seals, drive belts, oil and adjustments at Briquette making factory, Njeru
1. 5 staff from Instrumentation Division participated at the 2nd Ubora Design School in Italy
2. Kick started clinical and medical equipment assessment in 3 regions of Uganda with meeting and conferences
3. Materials for prototype development of the Portable Neonate Warmer (PNW) and the Wendi tracking device were procured
4. Medical device standards, software, project dissemination costs were incurred
5. Materials for manufacturing of 5 prototypes for the ECG Fand Clinical testing consumables were procured
6. Hardware design and analysis, Firmware design, simulation and prototyping was ongoing for the: Automatic indoor/outdoor Lighting System; Solar Fruit Dryer; Keypad based door lock system; Solar Powered Egg incubator; Weighing Scale; Automatic Voltage Regulator; Multi-purpose Temperature control monitoring; Fingerprint and pin code based security access control system; team oriented projects, electronic components were received, however, they will need to be replenished as prototyping, hardware and software integration continues.
7. Fabricated Cold room selves for Itojo Fruit Juice Processing Facility
8. Fabricated textile machines. These included 2 jack-looms, 2 spooling wheels, 18 knitting benches, 9 knitting tables, 2 warping mills, 4 working tables and 10 table looms fabricated

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

9. Installed and test run Palm Oil
Processing Plant in Kanungu

Reasons for Variation in performance

Insufficient funds to undertake all planned activities
Insufficient funds to undertake all planned projects

	Total	97,821
GoU Development	97,821	97,821
External Financing	0	0
AIA	0	0

Output: 08 Popularization of research and technologies

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QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
Create awareness and sensitize the public on UIRI's Research and Technological findings/results	<p>During Q1 the following publications were made:</p> <ol style="list-style-type: none"> 12th August 2018 Profiling of UIRI's industrialization efforts https://theugandan.com/2018/08/how-prof-kwesiga-is-championing-ugandas-sustainable-industrial-revolution/ The Ugandan.com 13th August 2018 Campus Bee profiled UIRI's core Activities https://campusbee.ug/featured/uiiri-is-nurturing-ugandan-startups-with-free-practical-skills-training/ The Campus Bee 24th August 2018 Profiling UIRI's New Deputy Executive Director on Page 43 Daily Monitor Conducted 17 guided tours aimed to exposure entrepreneurship opportunities at UIRI, in the areas of processes and innovations and to Boost practical skills learning in schools. 5 meat section Incubatees attended a workshop on financing SMEs these included 2 female and 3 were male of which 3 were youth and 2 were elders The team applied for IRB approval to conduct a study in children of the ECGF. The Division is in the process of filing a PCT patent application for the ECGF after completing a report on patentability of the technology. For the Uhora Project extensive testing on the phase change material to understand heat retention and dissipation was completed. The clinical needs assessment that was conduct. Instrumentation has been teaching Industrial Electronics and Instrumentation for ECUREI's BSc Biomedical Engineering Program at Mengo Hospital. UIRI will be involved together with Makerere University on a GCRF funded project to design prostheses using 3D printing. The project is for 3 years. The Instrumentation Division is in discussions to work with Prof. Andres Diaz Lantada from Universidad de Madrid to design devices for aging populations for the Pisa design school. UIRI coordinated and organized 16 trainings /workshops/ meetings to create awareness on UIRI's R&D Agenda UIRI conducted trainings for 290 people in technologies. 	<p>Item</p> <p>221011 Printing, Stationery, Photocopying and Binding</p> <p>227001 Travel inland</p>	<p>Spent</p> <p>18,452</p> <p>4,915</p>

Reasons for Variation in performance

Need for more funding for sensitization

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Uganda Industrial Research Institute

QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
		Total	23,367
		GoU Development	23,367
		External Financing	0
		AIA	0

Capital Purchases

Output: 72 Government Buildings and Administrative Infrastructure

Establishment of Government Buildings and Administrative infrastructure	1. 100% completion of the ATCG offices at formerly occupied UNBS premises at UIRI Campus. Monitoring the performance of the building during the defects liability period. 2. 100% completion of valuation and boundary opening of Land and buildings on Plot 42 Mukabya Road, belonging to UIRI Project. The Valuation Report was submitted by the consultants.	Item	Spent
		312101 Non-Residential Buildings	83,828

Reasons for Variation in performance

N/A

Total	83,828
GoU Development	83,828
External Financing	0
AIA	0

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

UIRI shall procure office and ICT equipment to ensure connectivity for facilitating Research and Development	During the Quarter the ICT Department uninstalled unlicensed Microsoft windows software on 35 computers. installed and activated Microsoft Windows 10 and Microsoft Office 2016 Professional on 35 computers. The printers and the computers were maintained and are now operating efficiently.	Item	Spent
		312213 ICT Equipment	10,000

Reasons for Variation in performance

ICT required service parts were still not procured. No funding was made available to facilitate completion of the maintenance

Total	10,000
GoU Development	10,000
External Financing	0
AIA	0

Output: 77 Purchase of Specialised Machinery & Equipment

Vote:110

Uganda Industrial Research Institute

QUARTER 1: Cumulative Outputs and Expenditure by End of Quarter

Annual Planned Outputs	Cumulative Outputs Achieved by End of Quarter	Cumulative Expenditures made by the End of the Quarter to Deliver Cumulative Outputs	UShs Thousand
UIRI shall procure specialized machinery and equipment for production processing and new technologies that can be easily adapted	The following were carried out under Q1 1. Initiated procurement of equipment for food analysis (soxletec, fibertec & kjeldtec system) 2. Reflow Oven, the Logic Analyzer and Digital IC Tester were procured and delivered for Instrumentation Division 3. Initiated procurement of laboratory chemicals, glassware and safety materials	Item 312202 Machinery and Equipment 312203 Furniture & Fixtures 312214 Laboratory Equipments	Spent 137,867 6,950 6,514

Reasons for Variation in performance

Lengthy procurement procedures

Total	151,331
GoU Development	151,331
External Financing	0
AIA	0
Total For SubProgramme	1,331,160
GoU Development	1,331,160
External Financing	0
AIA	0
GRAND TOTAL	2,589,495
Wage Recurrent	930,038
Non Wage Recurrent	284,356
GoU Development	1,331,160
External Financing	0
AIA	43,941

Vote:110

 Uganda Industrial Research Institute

QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
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Program: 04 Industrial Research

Recurrent Programmes

Subprogram: 01 Headquarters

Outputs Provided

Output: 01 Administration and Support Services

		Item	Spent
Recruit 5 new Employees keeping in mind gender and equity issues	Recruited 10 new employees, 5 male and 5 female from the different regions of the country	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	930,038
Provide Medical Insurance to all UIRI employees and their dependants keeping in mind gender and equity issues	Paid up Medical Insurance for all UIRI employees and there dependents	212101 Social Security Contributions	93,004
Insure institute Assets, Equipment, Vehicles, IT servers and Equipment	Paid up insurance dues for UIRI Assets, Equipment, Vehicles, and ICT equipments.	213001 Medical expenses (To employees)	116,815
1. Timely payment of Water, Electricity, Telephone and Connectivity bills	Paid Institute Utilities - Water, Electricity, Telephone and Connectivity	221001 Advertising and Public Relations	2,265
1. Timely payment of all staff salaries and benefits keeping in mind gender and equity issues	Paid all staff salaries and benefits on time	221003 Staff Training	10,000
Pay subscriptions to professional bodies	Paid off subscriptions dues to respective bodies	221009 Welfare and Entertainment	20,644
Facilitate general operations for day to day running of the institute	Facilitated the general operations of UIRI day to day running of the Institute	221012 Small Office Equipment	887
		222001 Telecommunications	1,500
		222003 Information and communications technology (ICT)	3,446
		223001 Property Expenses	3,925
		223005 Electricity	28,759
		223006 Water	17,500
		227001 Travel inland	5,485
		227002 Travel abroad	23,000
		227003 Carriage, Haulage, Freight and transport hire	1,067

Reasons for Variation in performance

N/A

Pending are electricity arrears

Total	1,258,334
Wage Recurrent	930,038
Non Wage Recurrent	284,356
AIA	43,941
Total For SubProgramme	1,258,334
Wage Recurrent	930,038
Non Wage Recurrent	284,356
AIA	43,941

Development Projects

Project: 0430 Uganda Industrial Research Institute

Outputs Provided

Output: 02 Research and Development

		Item	Spent
1. Research, product and process development for lactic acid a microbial bio-polymer of great application in food processing, cosmetics, pharmaceuticals and other industries developed and	8 Lactic Acid and Bioplastics (polylactide) production from cassava: Value addition to starch root tuber crops	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	290,320
	• The project addresses the development of a production process for lactic acid	212101 Social Security Contributions	19,121

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QUARTER 1: Outputs and Expenditure in Quarter

commercialized as additives and process aids.	from cassava by fermentation using Lactobacillus casei strain isolated from the gut of a child	213001 Medical expenses (To employees)	225,635
2. Analyze 250 samples so as to enhance capacity efficient, timely, authentic and verifiable analytical service provision	<ul style="list-style-type: none"> • UIRI is optimizing the production process to determine the right cassava weight to start with and how much water to add and inoculum • UIRI is also developing a process for concentration of the usually very dilute lactic acid to the level it is normally sold 	221003 Staff Training	15,000
3. Undertake Research and Development of 5 Bioactive phytochemicals identified	<ul style="list-style-type: none"> • UIRI is also developing a process for purification processes were ongoing • Once the lactic acid is produced at the right concentration UIRI will polymerize the lactic acid into polylactide for making bio-plastics 	221009 Welfare and Entertainment	30,000
4. Undertake Research and Development to develop Nutrition Supplements to combat deficiencies.	<ul style="list-style-type: none"> • Development of separation and purification processes were ongoing • Once the lactic acid is produced at the right concentration UIRI will polymerize the lactic acid into polylactide for making bio-plastics 	222003 Information and communications technology (ICT)	10,592
5. Undertake the process of Accreditation of the Chemistry laboratory which requires Renewal of UNBS laboratory recognition.	<ul style="list-style-type: none"> • Production of bioplastic from the polymerized lactic acid(delayed) 	223004 Guard and Security services	17,060
6. Purchase of Laboratory Chemicals, personnel protective equipment & materials	9. Production of Bioethanol from Cassava	223005 Electricity	77,219
7. Analyze 500 sample for chemical composition	<ul style="list-style-type: none"> • Production process is being developed together Future Ventures Ltd a company owned by two people Martin and Owilli George 	223006 Water	6,000
8. Purchase of GC-MS equipment- Analysis of essential oils and pesticides in foods	Malted sorghum, maize and green gram	224004 Cleaning and Sanitation	436
Provide Laboratory Analytical services to all Ugandans for validating product quality and product refinement.	Made the ethanol using Saccharomyces cerevisiae	227002 Travel abroad	30,000
Procure supply of SPF Eggs from South Africa	Failed to distil to determine the ethanol content because we didn't have an operational distillation unit. The product is still in the laboratory. The client went back to Abim in Karamoja waiting for us to get equipment. I have sent out a request for quotation but nobody has responded yet	227004 Fuel, Lubricants and Oils	10,000
Increase vaccine cold storage capacity	19. UIRI analyzed 120 laboratory samples for chemical composition & certificates issued. These included External and Internal laboratory samples, for; food, juice, water & waste water, drugs, minerals, soap, Detergents, alcoholic beverages, cosmetics, plants, natural products and petroleum products	228002 Maintenance - Vehicles	19,954
Procure supplies and Consumables	20. Analyzed 53 samples for microbial analysis		
Procure a new Semi Automated Equipment	21. UIRI participated in the proficiency tests which we performed very well and the Z-score was excellent		
1. Procure materials,ingredients,packaging & laboratory reagents to carryout R & D to develop new value added dairy products for the market	22. Cosmetics, soap and detergents and toiletries		
Initiate of Procurement for Gas oven, Spiral Dough Mixer, cake batter mixer	<ul style="list-style-type: none"> i. Cow Ghee Project UIRI using cow ghee was being used to make cosmetics: Ghee-Body Cream, Ghee-Body Lotion, Ghee-Hair Food, Ghee-Lip Balm & Ghee-Toilet soap? The mentioned products were stable on the shelves and standardization was on-going. The project is still at a laboratory scale ii. Avocado oil project Avocado oil was produced and analyzed in the chemistry laboratory. Standardization work was on-going). The project is still at a laboratory scale 		
Undertake farm activities to produce Ugandan made Essential Oils from the piloted crops			

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QUARTER 1: Outputs and Expenditure in Quarter

iii. Development of Guava leaf extract and Mango butter-based hair products: Hair Shampoo, 2- Conditioning Leave-in Mask, 3-Hair Spray, 4-Hair Food
The mentioned product formulation prototypes were developed and the project is still at a laboratory scale

1. BRENTEC / Vaccine Production Unit produced 3,000,000 doses of Newcastle Vaccine with total Sales of 2,116,000 doses and 1,027,000 doses to specifically Smallholder farmers. Estimated Households Reached at Small Holder Level are 16,500 households

2. Hardware design and analysis, Firmware design, simulation and prototyping was ongoing for the: Automatic indoor/outdoor Lighting System; Solar Fruit Dryer; Keypad based door lock system; Solar Powered Egg incubator; Weighing Scale; Automatic Voltage Regulator; Multi-purpose Temperature control monitoring; Fingerprint and pin code based security access control system; team oriented projects, electronic components were received, however, they will need to be replenished as prototyping, hardware and software integration continues.

20. The following subscriptions were paid
i. Agricultural Laboratory Association of Southern Africa (AgriLASA)
ii. South Africa Development Committee for Measurement and Traceability and SADC MET pts as required for Accreditation of the Chemistry Laboratory.

3. Commenced on method Validation for Vitamin A in oil & Flour using HPLC

4. 4 Research projects under Chemistry Laboratory were ongoing

i. Antimicrobial activity of banana flowers extract against bacteria

ii. Application of zeolites in removal of heavy metals in wastewater.

iii. Antimicrobial and anti-oxidant studies of essential oils from exotic plants

iv. Formulation of sensitizers from aloe vera

5. Lactic Acid and Bioplastics

(polylactide) production from cassava:

Value addition to starch root tuber crops

- The project addresses the development of a production process for lactic acid from cassava by fermentation using *Lactobacillus casei* strain isolated from the gut of a child

- UIRI is optimizing the production process to determine the right cassava weight to start with and how much water

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QUARTER 1: Outputs and Expenditure in Quarter

to add and inoculum

- UIRI is also developing a process for concentration of the usually very dilute lactic acid to the level it is normally sold
- Development of separation and purification processes were ongoing
- Once the lactic acid is produced at the right concentration UIRI will polymerize the lactic acid into polylactide for making bio-plastics

- Production of bioplastic from the polymerized lactic acid(delayed)

6. Production of Bioethanol from Cassava

- Production process is being developed together Future Ventures Ltd a company owned by two people Martin and Owilli George

Malted sorghum, maize and green gram
Made the ethanol using *Saccharomyces cerevisiae*

Failed to distil to determine the ethanol content because we didn't have an operational distillation unit. The product is still in the laboratory. The client went back to Abim in Karamoja waiting for us to get equipment. I have sent out a request for quotation but nobody has responded yet

7. Materials for manufacturing of 5 prototypes for the ECG Fand Clinical testing consumables were procured

10. UIRI established semi commercial essential oil pilot plots with emphasis on Rose geranium and lemon balm.

11. Perfumes and essential oils

- Two clients wan UIRI to develop with them perfumes and essential oils products. We are waiting for them to procure their own raw materials

Trained incubatee (Ms. Fatuma Balinda) in perfume formulation from the biotechnology laboratory

Have taken the client through the theoretical part of perfume formulation, reagents and ingredients required

The client is in the process of purchasing raw materials to start practical hands on perfume production

- Formulation of non-alcoholic mouthwash for Dr. Ocheng Francis from Mengo Hospital Dental Unit and Makerere University Medical School Dental Unit. Have done literature search and come up with a list of raw materials required and the client has already procured the raw materials

12. In vitro assessment of antibacterial activity of selected plant ethanolic extracts against *Streptococcus pneumonia*

i. Project research was completed and awaiting for funds to disseminate the results to the innovator in Kamuli district

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QUARTER 1: Outputs and Expenditure in Quarter

and develop a production process for making the herbal remedy which we verified as being efficacious

13. Yoba for Life project is undet implementing in collaboration with Heifer International. UIRI's role is distribution of inoculum and training clients in Kampala how to make the yogurt starter cultures

14. The mushroom sausage was still under development, it has not yet reached the commercial stage

15. 5 staff from Instrumentation Division to participate in 2nd Uboru Design School in Italy

16. Kick started clinical and medical equipment assessment in 3 regions of Uganda with meeting and conferences

17. Materials for prototype development of the Portable Neonate Warmer (PNW) and the Wendi tracking device were procured

18. Medical device standards, software, project dissemination costs were incurred

Reasons for Variation in performance

1. Equipment is at the end of its product life cycle and is prone to malfunctioning
2. Lack of funds to improve market access of vaccine distribution in other parts of the country

1. Unpaid subscriptions include Online Membership subscription for:
 - iii. Proficiency Testing Scheme (PTA)
 - iv. AOAC (Association of Analytical Chemists),
 - v. American Public Health Association,
 - vi. Science Direct Journal
 - vii. South African Journal of Chemistry (SAJC).
 - viii. Fondo Para La Proteccion de los Animales Salvajes (FAPAS)
 - ix. African Journal of Pure and Applied Chemistry (AJPAC).

N/A

Total	751,337
GoU Development	751,337
External Financing	0
AIA	0

Output: 03 Industrial and technological Incubation

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QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
1. Take on MSME incubates on grounds of gender inclusion while ensuring regional balance	1. BRENTec / Vaccine Production Unit produced 3,000,000 doses of Newcastle Vaccine with total Sales of 2,116,000 doses and 1,027,000 doses to specifically Smallholder farmers. Estimated Households Reached at Small Holder Level are 16,500 households	Item 211103 Allowances 221003 Staff Training 223005 Electricity 223006 Water	Spent 8,768 14,611 30,000 12,000
2. Train MSME in best production practices	2. Established semi commercial essential oil pilot plots with emphasis on Rose geranium and lemon balm.	224006 Agricultural Supplies 227001 Travel inland	5,020 4,170
3. Train incubatees in business management practices	3. Incubatees under Meat Technology produced 47,879 Kilos of Processed Meat	227002 Travel abroad	20,000
4. Provide Laboratory Analytical Services to for validating product quality and product refinement.	4. Two local entrepreneurs undertook capacity building in utilization of distilled essential oils and floral water	227004 Fuel, Lubricants and Oils 228002 Maintenance - Vehicles	20,000 34,786
5. Support MSMEs in production of quality and competitive productivity	5. Procured equipment to scale up the Biofuel production unit 6. Drafted a concept note for optimization of bioethanol productivity using locally available yeast strains 7. Sized and installed a functional solar system at Kabale Vocational Institute whose location is off the electricity grid 8. Energy Systems Division fabricated briquette machines and conducted training from 18th to 21st September, 2018 on briquette production using crop biomass as part of a project implemented by the Faculty of Agriculture and Environment, Gulu University on rice value chain in Northern Uganda. 9. Produced books covers from waste paper 10. Produced absorbent Paper - 150 samples made awaiting testing 11. Incubated 15 female and 6 male in handmade paper production from the areas of Luweero and Kampala		

Reasons for Variation in performance

- Fowl Pox Vaccine and Gumboro Vaccine Development did not commence due to insufficient funds
- Vaccine Production Equipment is at the end of its product life cycle and is prone to malfunctioning
- Lack of funds to improve market access of vaccine distribution in other parts of the country
- Most training applicants failed to turn up for training because they were unable to fund their training.
- BMFL Stopped production due to financial constraints
- Sante Production is irregular due to limited working capital
- Arua Nile Natural Ltd is currently not in production due to lack of power connectivity
- The Milk Powder Plant is in a very dilapidated state. It needs urgent renovation. The roof and floors are leaking; rust is eating away the plates posing his risk for people working in this plant
- Dairy Equipment maintenance: Frequent breakdown of ageing equipment and machinery in the Dairy Pilot Plants – Requires allocation of funds for execution of a comprehensive Equipment maintenance Program. Old obsolete equipment and machinery need to be replaced with new efficient equipment and machinery especially in the yoghurt and ice cream plant. Adequate spare parts need to be stocked- for preventive maintenance, scheduled repairs and economic maintenance
- Remodelling of the food pilot plants is urgently required as some of the floor and wall tiles are broken and need urgent repair to ensure compliance with food safety and regulatory requirements

Total 149,355

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Uganda Industrial Research Institute

QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		GoU Development	149,355
		External Financing	0
		AIA	0

Output: 04 Model Value Addition Centre Establishment

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QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
1. Set up of at least 1 Dairy Processing business incubation center in (on regional basis)	During the quarter the following were achieved 1. 100% completion of the ATCG offices at formerly occupied UNBS premises at UIRI Campus. Monitoring the performance of the building during the defects liability period.	Item 223005 Electricity 223006 Water	Spent 45,000 10,000
2. Design Architectural Plans for set up a Cheese Processing Pilot Plant to be used for :- training, business incubation, product development, demonstration of Quality Assurance Systems	2. 100% completion of valuation and boundary opening of Land and buildings on Plot 42 Mukabya Road, belonging to UIRI Project. The Valuation Report was submitted by the consultants.		
3. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the proposed Wine Factory at Nebbi	3. 60% completion and doors at the Silk Processing Line Facility in Sheema district were installed		
4. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the proposed construction of the Instrumentation Laboratory	4. 50% completion of the construction of sub-structural works and casting of the floor slab for the container platform for Wine Production.		
5. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the Proposed Fruit Juice Processing Plant for Maffaco	5. Proposed Sanitary Napkin Production Facility is at design stage		
6. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the Proposed Peanut Paste Processing Plant in Soroti district	6. Completed processing of Leasehold Titles for plots 461 & 3739, block 113, Kyagwe, Namanve for the Machining, ,manufacturing and Industrial Skills Training Center Namanve		
7. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the Proposed rehabilitation of Esia Mixed Farm, Adjumani	7. Purchased materials to complete Epoxy Floor Finish for the Palm Oil Facility in Kanungu		
8. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the Proposed Cheese processing plant at Rubale Ntungamo district for Mr. Karuhanga Justus	8. Completed the design and cost estimate for the Tile Manufacturing Facility in Wakiso		
9. Print contract documentation. Issuing out bids to different contractors. Tender evaluation and issuing the contract for the Proposed Lemon grass and Soap processing plant in Kabale industrial area for Yildi enterprises	9. Completed the Internal plastering works and rendering to external walls for Animal Feeds Facility in Busiika		
10. Construction of internal walling, first fix of mechanical and electrical works of the Proposed ATCG offices at formerly occupied UNBS premises - A functional DNA sequencing facility			

Vote:110

 Uganda Industrial Research Institute

QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
<i>Reasons for Variation in performance</i>			
Need for Innovation Fund and Commercialization Fund			
		Total	55,000
		GoU Development	55,000
		External Financing	0
		AIA	0

Output: 05 Facility Repair and Maintenance

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QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		Item	Spent
1. Calibration & Maintenance of existing Equipment (20) for maximum utilization of equipment	1. 95% completion of renovation of Peanut Processing Facility in KUMI. Demolition and alteration works, replacement of windows and doors, masonry works, internal and external finishing works completed.		
2. Remodel the Printed Circuit Board (PCB) Manufacturing laboratory and procurement of requisite equipment so as to create a state of the art electronics design and small scale production unit for innovations from Instrumentation and support space for incubatees and industrial trainees - Infrastructure remodeling, creating a second floor and production space (Civil Works)	2. Completed installation of Air Conditioning and internet connection in the chemistry laboratory 3. Partially completed the Remodeling of the Chemistry Laboratory (2 Entrance doors to be replaced and install new ventilation) 4. Completed the installation of Air Conditioning system in the Chemistry Laborator. They are fully functional		
3. Initiation of procurement process for supply of equipment to fully upgraded Yogurt and Ice Cream Pilot Plants so as to be able to serve the increasing number of incubatees (8) effectively	5. Completed the spot patching, manhole cover replacement and tile Replacement at Meat Processing Plant 6. Completed re-painting of selected UIRI facilities; Facilities that were painted include: Industrial Resource Center Interior, Board Room Interior, Instrumentation Section, Juice Plant Exterior and Meat Plant Exterior. Security Gate House, Chemistry Laboratory, Business Development Center building, Buildings occupied by UNBS.		
4. Procurement of Protective wear for Pilot Plant Staff	7. Completed the renovation of the former UNBS block at UIRI. Finished works include; Installation of tiles, internal and external painting, plumbing and electrical works, Installation of doors, iron mongery and Polishing of terrazzo.		
5. Procure spares, components and consumables or maintenance of On-site and Off-site Production Facilities Meat technology, dairy technology, bakery, juice, bamboo, workshop machinery and equipment, Ceramics, Bamboo machinery maintenance Refrigeration, air conditioning, water, compressed air and all equipment maintenance	8. Completed modification works for Livara Production Unit. Still under the defects liability period 9. 6 equipment; the sausage filler, bowl cutter, small meat mincer, and 3 cold-rooms were repaired		
6. Procure spares, assemblies, installations for the long Overdue for overhaul electricity infrastructure requiring replacement of High Voltage switch gears	10. Routine/preventive maintenance activities for all the plant machines and electrical appliances were carried out at Nabusanke Fruit processing Facility. All the machine moving parts i.e. pumps, gears, motors, shafts were lubricated, fault finding and troubleshooting the contactors and relays of the mains supply etc. The compound was slashed, weeds sprayed and overgrown trees trimmed.		
7. Undertake Minerals and Material department equipment repairs	11. Replaced the old sand filtering unit in Juice Plant with a new one 12. Replaced faulty toilet pan at the Analytical Laboratory washroom		
8. Undertake further re- modelling of Laboratory facilities to meet accommodation and environment requirements of ISO 17025- Installation of air conditioners			

Reasons for Variation in performance

Need for funds to address the issue of Malfunction air conditioners in the deboning and preparation rooms, which resulted in unsafe meat handling temperatures.

Total 0

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QUARTER 1: Outputs and Expenditure in Quarter

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

Output: 06 Industrial Skills Development and Capacity Building

		Item	Spent
Provide opportunity to students of higher institutions of learning across the country to practical experience / hands on experience through our Industrial Training Program	1. Trained 111 people (15 in Cosmetics production and 96 in Soap, Detergents, & Toiletries production) of which 45 were Females and 66 were Male majorly form the Central and western regions	224006 Agricultural Supplies	9,120
1. Train 14 staff in ISO 17025 at South African National Accreditation system (SANAS)	2. Trained 7 students from Uganda Petroleum Institute Kigumba various aspects of mechanical engineering and maintenance		
2. Training 4 staff in essential oil extraction and analysis	3. Trained 7 students from KYU, MAK, NVTI in electrical engineering and maintenance		
3. Train and improve skills of one Meat processing personnel	4. Trained 2 students from NVTI in carpentry		
	5. Trained 24 students from Gulu University in briquette production		
	6. Trained 9 students and 5 graduate students in tailoring, Garment and product construction.		
1. Provide training to 334 individuals including youth, women, men and persons with disability with per-enterprise development services to ensure that businesses set off on the right foot (Having considered all factors necessary) To ensure sustainability of SMEs through skills transfer and business advice.	7. Trained 5 university students and 3 community trainees on how to operate the Two Head Flatbed Embroidery Machine		
	8. Initiated request for Chemistry Staff training in Good laboratory practice & ISO 17025 basics		
	9. Trained Rugiga Youth Development Initiative in Value addition to fruits to make products like juices, jam, wine and electric dried fruits		
	10. Trained Uganda Women Entrepreneurship Association (UWEAL) Production of juice and Bushera		
	11. Trained 3 male and 1 female in Pineapple juice processing and cocktail juice from the Muslim community		
	12. Trained Uganda Martyrs Primary School, Kabale in production of passion juice and pineapple juice		
	13. Trained Pamoja Investments in production of passion juice and pineapple juice		
	14. Trained Golooba Gilbert of Kawanda Outgrowers in Hot pepper processing		
	15. Trained Uganda Martyr's Choir Namugongo Catholic Shrine in production of fruit juice, jam, wine and dried fruits		
	16. Trained Kyebajangobora Development Organization in skills of processing jackfruit jam, mango juice, jackfruit juice, dried jackfruit		
	17. 2 groups were trained under Meat		

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QUARTER 1: Outputs and Expenditure in Quarter

Technology, with a total number of 14 youth participants, 4 of the participants were female whereas 10 were male.

18. Trained 36 students of Makerere, Kyambogo, Gulu, Mukono university in Good laboratory practice.

19. Conducted training of 11 students from tertiary institutions, KYU, MUK, UIIU of 3 male and 8 female in dairy processing focusing on pasteurized Milk, ice cream and Yoghurt production technologies.

20. Conducted training of 7 male and 21 female that included youth grouped together based on their training needs and desired training period. All the 28 some from Gulu, Ntoroko, Mbale, Luwero and Mukono all trained in dairy processing focusing on dairy products technology Yoghurt, ice cream, pasteurized milk, and soft cheese, soy milk and soy yoghurt.

21. Trained 17 male and 13 female a total of 30 from Kyotera in probiotic Yoghurt, honey sweetened yoghurt, soy milk, fruit pulps, soy yoghurt

22. Trained already existing farmers, local persons and groups of people interested in mushroom growing and value addition as an enterprise

23. 5 meat section Incubatees attended a workshop on financing SMEs these included 2 female and 3 were male of which 3 were youth and 2 were elders

24. 5 university students were trained under the ICT and BDC Training in ICT skills: programming, user support, networking, and server administration.

Reasons for Variation in performance

Many people have applied for training in different processing, but most of them are unable to foot the cost of training materials. Funds need to be allocated to facilitate training programs for this category. A few who can provide their training materials continue to be trained

N/A

Total	9,120
GoU Development	9,120
External Financing	0
AIA	0

Output: 07 Technology, Innovation, Transfer and Development

	Item	Spent
1. Under Medical Device Design and Development for Maternal and Child Health - There will be Preparation of Clinical protocol for IRB approval for each of the medical devices/ Technology refinement of the devices/ Procurement of requisite test equipment	10. Diverged drain line from pilot plant to wastewater treatment plant Diversion of old blocked drainage line	223005 Electricity 62,500
	11. Repaired the leaking main water supply pipe	228003 Maintenance – Machinery, Equipment & Furniture 35,321
	12. Connected two top plugs for UPS in Vaccine Laboratory	
	13. Replaced a fluorescent tube and damaged choke in Executive Director's Office reception	
2. Procurement of Materials, components and consumables for fabrication and deployment of Small scale food	14. Installed single double sockets in	

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QUARTER 1: Outputs and Expenditure in Quarter

processing equipment - Fabrication of Passion fruit extraction equipment	Instrumentation Unit workshop 15. Replaced a hand dryer in the Yorghut & Ice cream Pilot plant
3. Procurement of Materials, components and consumables for Design, Fabrication and dissemination of fabrication of briquette press equipment's	16. Carried out, continuity and megger/insulation tests for the Polishing Machine motor in Mechanical workshop 17. Troubleshoot and rectified the Non starting problem of the Dough Mixer Machine Bakery pilot plant (replaced a damaged cable)
4. Procure Materials, components, and consumables for design, fabrication and operation of Hand and table looms	18. Training of Students from Higher Institutions of Learning in electrical and plumbing maintenance
5. Prototype and carry out test runs of the ECGF (Electronically Controlled Gravity Feed)	19. Supplied power line to the Cake Mixer Machine in Bakery pilot plant 20. Daily checks /control and monitoring and cleaning of UIRI Standby generator sets were routinely done 21. Replaced an ordinary double socket with a single phase industrial socket in Mushroom section
1. Smart Drip Irrigation System design, development and testing - Electronics and mechanical design of smart drip system/ Engaging interested farmers to pilot the prototype	22. Installed a single phase industrial socket in PCB Lab for a new machine 23. Dough Mixer Machine Motor rewinding in Bakery Pilot Plant rework 24. Shearing machine repaired for hydraulic and electro-pneumatic repairs
2. Mineral and material Beneficiation of Development/Neglected/Non-Metallic or Low Value Minerals and Materials. - Procurement of a standard set of Sieves - Field survey, -Sample collection & - Procurement of selected low value minerals i.e. Sand, Kaolin, Feldspar, Clay, Marble, Limestone, Granite, Gypsum and tourmaline	25. Repaired the cake mixer, filling, machining and adjustment of clutch and gear teeth in the bakery section 26. Replaced 9 drive belts, oil and adjustments of the Bowl Cutter 27. Replaced the Mincer machine gear teeth filling of meat technology 28. Replaced the of worn-out bearings, rubber seals, drive belts, oil and adjustments at Briquette making factory, Njeru
3. Plasma waste processing system - Develop a system that uses plasma to process waste into clean energy fuel as well as safe disposal of hazardous waste - Procure materials for assembling and building of prototype plasma torches.	1. 5 staff from Instrumentation Division participated at the 2nd Uboru Design School in Italy 2. Kick started clinical and medical equipment assessment in 3 regions of Uganda with meeting and conferences 3. Materials for prototype development of the Portable Neonate Warmer (PNW) and the Wendi tracking device were procured 4. Medical device standards, software, project dissemination costs were incurred 5. Materials for manufacturing of 5 prototypes for the ECG Fand Clinical testing consumables were procured 6. Hardware design and analysis, Firmware design, simulation and prototyping was ongoing for the: Automatic indoor/outdoor Lighting System; Solar Fruit Dryer; Keypad based door lock system; Solar Powered Egg incubator; Weighing Scale; Automatic Voltage Regulator; Multi-purpose Temperature control monitoring;

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Uganda Industrial Research Institute

QUARTER 1: Outputs and Expenditure in Quarter

Fingerprint and pin code based security access control system; team oriented projects, electronic components were received, however, they will need to be replenished as prototyping, hardware and software integration continues.

7. Fabricated Cold room selves for Itojo Fruit Juice Processing Facility

8. Fabricated textile machines. These included 2 jack-ooms, 2 spooling wheels, 18 knitting benches, 9 knitting tables, 2 warping mills, 4 working tables and 10 table looms fabricated

9. Installed and test run Palm Oil Processing Plant in Kanungu

Reasons for Variation in performance

Insufficient funds to undertake all planned activities

Insufficient funds to undertake all planned projects

Total	97,821
GoU Development	97,821
External Financing	0
AIA	0

Output: 08 Popularization of research and technologies

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QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
1. Participate at 1 exhibition 2. Create awareness and sensitive the public on UIRI's Research and Technology Findings and results 3. Improve UIRI's image; Improve dissemination of information internally and externally by 20% Visits to Foreign Missions; Newsletter, Monthly Reports, Two News Paper Adverts, 4. Four Outreach activities Outreach activities; Field Evaluation activities 5. Design and development of promotional materials 3 Training videos for for value addition, continue design support to incubatees Design of magazine, posters, brochures, flyers 6. Create awareness of UIRI, products and services; 7. Strengthen UIRI's Networks with Government Institutions, Foreign Missions, NGO's and the Media	During Q1 the following publications were made: 1. 12th August 2018 Profiling of UIRI's industrialization efforts https://theugandan.com/2018/08/how-prof-kwesiga-is-championing-ugandas-sustainable-industrial-revolution/ The Ugandan.com 2. 13th August 2018 Campus Bee profiled UIRI's core Activities https://campusbee.ug/featured/uiri-is-nurturing-ugandan-startups-with-free-practical-skills-training/ The Campus Bee 3. 24th August 2018 Profiling UIRI's New Deputy Executive Director on Page 43 Daily Monitor 4. Conducted 17 guided tours aimed to exposure entrepreneurship opportunities at UIRI, in the areas of processes and innovations and to Boost practical skills learning in schools. 5. 5 meat section Incubatees attended a workshop on financing SMEs these included 2 female and 3 were male of which 3 were youth and 2 were elders 6. The team applied for IRB approval to conduct a study in children of the ECGF. The Division is in the process of filing a PCT patent application for the ECGF after completing a report on patentability of the technology. For the Uboru Project extensive testing on the phase change material to understand heat retention and dissipation was completed. The clinical needs assessment that was conduct. Instrumentation has been teaching Industrial Electronics and Instrumentation for ECUREI's BSc Biomedical Engineering Program at Mengo Hospital. UIRI will be involved together with Makerere University on a GCRF funded project to design prostheses using 3D printing. The project is for 3 years. The Instrumentation Division is in discussions to work with Prof. Andres Diaz Lantada from Universidad de Madrid to design devices for aging populations for the Pisa design school. 7. UIRI coordinated and organized 16 trainings /workshops/ meetings to create awareness on UIRI's R&D Agenda 8. UIRI conducted trainings for 290 people in technologies.	Item 221011 Printing, Stationery, Photocopying and Binding 227001 Travel inland	Spent 18,452 4,915

Reasons for Variation in performance

Need for more funding for sensitization

Total 23,367

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QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		GoU Development	23,367
		External Financing	0
		AIA	0

Capital Purchases

Output: 72 Government Buildings and Administrative Infrastructure

Feasibility Studies, Design and set out of foundations of	1. 100% completion of the ATCG offices at formerly occupied UNBS premises at UIRI Campus. Monitoring the performance of the building during the defects liability period.	Item	Spent
1. 1 Dairy Processing business incubation center in (central region)	2. 100% completion of valuation and boundary opening of Land and buildings on Plot 42 Mukabya Road, belonging to UIRI Project. The Valuation Report was submitted by the consultants.	312101 Non-Residential Buildings	83,828
2. 1 Dairy Processing business incubation center in (Western region)			
3. 1 Dairy Processing business incubation center in (Northern region)			
4. 1 Dairy Processing business incubation center in (Eastern region)			
5. A Cheese Processing Pilot Plant			
6. A proposed Wine Factory in Nebbi district			
7. A proposed Fruit Juice Processing Plant for Maffaco			
8. A proposed Peanut Paste Processing Plant in Soroti district			
9. Rehabilitate Esia Mixed Farm, Adjumani			
10. A proposed Cheese processing plant at Rubale Ntungamo district for Mr. Karuhanga Justus			
11. Proposed Instrumentation Laboratory			
12. A proposed Lemon grass and Soap processing plant in Kabale industrial area for Yildi enterprises			
13. Complete the ATCG facility for a functional DNA sequencing facility			

Reasons for Variation in performance

N/A

Total	83,828
GoU Development	83,828
External Financing	0
AIA	0

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

1. Procure ICT Hardware which shall include Desktop computers, Servers (Server room), Laptops, Work stations (for specialized computing) Projectors (Above 3500 lumens), UPS replacement batteries, Replacement keyboards, Replacement mouse	During the Quarter the ICT Department uninstalled unlicensed Microsoft windows software on 35 computers. installed and activated Microsoft Windows 10 and Microsoft Office 2016 Professional on 35 computers. The printers and the computers were maintained and are now operating efficiently.	Item	Spent
2. Procure Software development initiatives, such as assorted prototype development equipment and accessories		312213 ICT Equipment	10,000

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Uganda Industrial Research Institute

QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
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Reasons for Variation in performance

ICT required service parts were still not procured. No funding was made available to facilitate completion of the maintenance

Total	10,000
GoU Development	10,000
External Financing	0
AIA	0

Output: 77 Purchase of Specialised Machinery & Equipment

Procure any of the following equipment as at point required	The following were carried out under Q1	Item	Spent
1. Laboratory Equipment - Electric dryer (Dehydrator), Pasteurizer, Extruder Semi-automated bottle filler, Spray dryer, Double jacketed electric steam pot kettle, Water Distillation unit, Deionizer, Laboratory blenders, TDS & Conductivity meter, Turbidity meter, pH meter, Centrifuge, Hydrogen generator for Gas chromatography, Fibertec System, Soxhtec system, Kjeldtec system, Analytical balance, Laboratory refrigerators/freezer Gas Chromatography / Mass Spectrometer (GC/MS) for essential oil analysis, Chemicals & standards, Heavy duty grinder	1. Initiated procurement of equipment for food analysis (soxhtec, fibertec & kjeldtec system) 2. Reflow Oven, the Logic Analyzer and Digital IC Tester were procured and delivered for Instrumentation Division 3. Initiated procurement of laboratory chemicals, glassware and safety materials	312202 Machinery and Equipment 312203 Furniture & Fixtures 312214 Laboratory Equipments	137,867 6,950 6,514
2. Laboratory Ware - Droppers, Burettes, Pipettes, Pipette fillers, Measuring cylinders, Spatulas, Burette stands, Glass rods, Heavy duty aluminum pans, Cooled Incubator, Incubator, Incubator/Rocking Shaker, Ultra low temperature freezer, Laboratory fridge/freezer, Laboratory fridge, Precision balance, Temperature Data loggers, Thermo-hygrometer, Label printer, Laboratory stools Automated Food Pathogen detection system			
3. Procurement of Procurement of two Multimedia Computers and accessories for development of UIRI promotional videos, Photography Cameras, Video Camera Accessories			

Reasons for Variation in performance

Lengthy procurement procedures

Total	151,331
GoU Development	151,331
External Financing	0

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 Uganda Industrial Research Institute

QUARTER 1: Outputs and Expenditure in Quarter

Outputs Planned in Quarter	Actual Outputs Achieved in Quarter	Expenditures incurred in the Quarter to deliver outputs	UShs Thousand
		AIA	0
		Total For SubProgramme	1,331,160
		GoU Development	1,331,160
		External Financing	0
		AIA	0
		GRAND TOTAL	2,589,494
		Wage Recurrent	930,038
		Non Wage Recurrent	284,356
		GoU Development	1,331,160
		External Financing	0
		AIA	43,941

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QUARTER 2: Revised Workplan

<i>US\$ Thousands</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)
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Program: 04 Industrial Research

Recurrent Programmes

Subprogram: 01 Headquarters

Outputs Provided

Output: 01 Administration and Support Services

	Item	Balance b/f	New Funds	Total
Recruit 5 new Employees keeping in mind gender and equity issues	213001 Medical expenses (To employees)	13,185	0	13,185
1. Timely payment of all staff salaries and benefits keeping in mind gender and equity issues	213002 Incapacity, death benefits and funeral expenses	2,000	0	2,000
	213004 Gratuity Expenses	168,677	0	168,677
1. Timely payment of Water, Electricity, Telephone and Connectivity bills	221001 Advertising and Public Relations	4,735	0	4,735
	221002 Workshops and Seminars	5,000	0	5,000
Provide Medical Insurance to all UIRI employees and their dependants keeping in mind gender and equity issues	221009 Welfare and Entertainment	10,076	0	10,076
	221011 Printing, Stationery, Photocopying and Binding	6,000	0	6,000
Insure institute Assets, Equipment, Vehicles, IT servers and Equipment	221012 Small Office Equipment	113	0	113
	222001 Telecommunications	3,500	0	3,500
Facilitate general operations for day to day running of the institute	222003 Information and communications technology (ICT)	1,554	0	1,554
Pay subscriptions to professional bodies	223001 Property Expenses	275	0	275
	227001 Travel inland	1,515	0	1,515
	227003 Carriage, Haulage, Freight and transport hire	3,933	0	3,933
	Total	220,563	0	220,563
	<i>Wage Recurrent</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Non Wage Recurrent</i>	<i>194,128</i>	<i>0</i>	<i>194,128</i>
	<i>AIA</i>	<i>26,434</i>	<i>0</i>	<i>26,434</i>

Development Projects

Project: 0430 Uganda Industrial Research Institute

Vote:110 Uganda Industrial Research Institute

QUARTER 2: Revised Workplan

<i>US\$ Thousands</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)
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Outputs Provided

Output: 02 Research and Development

	Item	Balance b/f	New Funds	Total
Increase Production and Distribution of KUKUSTAR - Newcastle disease vaccine.	211102 Contract Staff Salaries (Incl. Casuals, Temporary)	47,180	0	47,180
1. Procure materials, ingredients, packaging & laboratory reagents to carryout R & D to develop new value added dairy products for the market	212101 Social Security Contributions	14,629	0	14,629
	213001 Medical expenses (To employees)	4,365	0	4,365
	222003 Information and communications technology (ICT)	9,408	0	9,408
1. Research, product and process development of lactic acid a microbial bio-polymer	223004 Guard and Security services	2,940	0	2,940
	224004 Cleaning and Sanitation	16,564	0	16,564
2. Analyze 250 samples so as to enhance capacity efficient, timely, authentic and verifiable analytical service provision	224005 Uniforms, Beddings and Protective Gear	5,000	0	5,000
	228002 Maintenance - Vehicles	46	0	46
3. Continue undertaking Undertake Research and Development of 5 Bioactive phytochemicals identified	Total	100,132	0	100,132
	GoU Development	100,132	0	100,132
4. Procure materials and equipment for utilization in Research and Development of Nutrition Supplements to combat deficiencies.	External Financing	0	0	0
	AIA	0	0	0
5. Purchase of 50 certified reference materials				
6. Pay subscription to professional memberships- AOAC, Journals				
7. Analyze 500 sample for chemical composition				

Undertake farm activities to produce Ugandan made Essential Oils from the piloted crops

Provide Laboratory Analytical services to all Ugandans for validating product quality and product refinement.

Output: 03 Industrial and technological Incubation

	Item	Balance b/f	New Funds	Total
1. Take on MSME incubates on grounds of gender inclusion while ensuring regional balance	211103 Allowances	6,232	0	6,232
2. Train MSME in best production practices	221003 Staff Training	389	0	389
3. Train incubatees in business management practices	223004 Guard and Security services	10,000	0	10,000
	224006 Agricultural Supplies	54,241	0	54,241
4. Provide Laboratory Analytical Services to for validating product quality and product refinement.	227001 Travel inland	830	0	830
5. Support MSMEs in production of quality and competitive productivity	228002 Maintenance - Vehicles	5,214	0	5,214
	Total	76,906	0	76,906
	GoU Development	76,906	0	76,906
	External Financing	0	0	0
	AIA	0	0	0

Vote:110 Uganda Industrial Research Institute

QUARTER 2: Revised Workplan

<i>US\$ Thousand</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)
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Output: 04 Model Value Addition Centre Establishment

1. Set up of at least 1 Dairy Processing business incubation center in (on regional basis)
2. Under take Renovation of the building
3. Site clearance, demolition works for the proposed Wine Factory at Nebbi
4. Site clearance, demolition works for the proposed construction of the Instrumentation Laboratory
5. Site clearance, demolition works for the proposed construction for the Proposed Fruit Juice Processing Plant for Maffaco
6. Site clearance, demolition works for the proposed construction for the Proposed Peanut Paste Processing Plant in Soroti district
7. Site clearance, demolition works for the proposed construction for the Proposed rehabilitation of Esia Mixed Farm, Adjumani
8. Site clearance, demolition works and construction for the Proposed Cheese processing plant at Rubale Ntungamo district for Mr. Karuhanga Justus
9. Site clearance, demolition works and construction for the Proposed Lemon grass and Soap processing plant in Kabale industrial area for Yildi enterprises
10. Finishing works, installation of openings and second fix of mechanical and electrical works, finishing works of the Proposed ATCG offices at formerly occupied UNBS premises - A functional DNA sequencing facility

Vote:110 Uganda Industrial Research Institute

QUARTER 2: Revised Workplan

<i>US\$ Thousand</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)		
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Output: 05 Facility Repair and Maintenance

	Item	Balance b/f	New Funds	Total
1. Service and maintenance of HPLC, AAS, UV, FTIR				
2. Identification and procurement of requisite equipment for the facility/ Continuation of Civil Works	224004 Cleaning and Sanitation	12,000	0	12,000
	Total	12,000	0	12,000
3. Receipt and clearing of equipment to fully upgraded yogurt pilot Plants				
	<i>GoU Development</i>	<i>12,000</i>	<i>0</i>	<i>12,000</i>
	<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
4. Procurement of Cleaning Materials for Pilot Plants	<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>
5. Procure spares, components and consumables or maintenance of On-site and Off-site Production Facilities Meat technology, dairy technology, bakery, juice, bamboo, workshop machinery and equipment, Ceramics, Bamboo machinery maintenance Refrigeration, air conditioning, water, compressed air and all equipment maintenance				
6. Procure spares, assemblies, installations for the long Overdue for overhaul electricity infrastructure requiring replacement of lights and fittings				
7. Undertake UIRI Electric fence repair				
8. Proposed laying of drainage line from septic tank to waste water treatment plant by Diversion of waste water overflow from septic tank to the treatment plant				

Vote:110 Uganda Industrial Research Institute

QUARTER 2: Revised Workplan

<i>US\$ Thousands</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)			
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Output: 06 Industrial Skills Development and Capacity Building

	Item	Balance b/f	New Funds	Total
Provide opportunity to students of higher institutions of learning across the country to practical experience / hands on experience through our Industrial Training Program	224006 Agricultural Supplies	60,880	0	60,880
	Total	60,880	0	60,880
1. Train 4 staff in Documentation systems and audit		<i>GoU Development</i>	<i>0</i>	<i>60,880</i>
2. Train Chemistry Technical Personnel in analysis competence		<i>External Financing</i>	<i>0</i>	<i>0</i>
3. Facilitate 2 staff attending international conference in organic synthesis		<i>AIA</i>	<i>0</i>	<i>0</i>
4. Train and improve skills of one Meat processing personnel				

1. Provide training to 334 individuals including youth, women, men and persons with disability with per-enterprise development services to ensure that businesses set off on the right foot (Having considered all factors necessary) To ensure sustainability of SMEs through skills transfer and business advice.

Output: 07 Technology, Innovation, Transfer and Development

	Item	Balance b/f	New Funds	Total
1. Pilot Prototype on the UIRI campus for proof of concept/ Further testing of the Smart Irrigation technology	228003 Maintenance – Machinery, Equipment & Furniture	14,679	0	14,679
2. Carry out Material preparation (Crashing, Milling, Screening/Sizing) of the minerals, -Analysis of the samples and -Data collection and storage on each sample. Over 5 sets of data on the minerals to be stored		Total	0	14,679
		<i>GoU Development</i>	<i>0</i>	<i>14,679</i>
3. Procure Laboratory facility for testing of prototype system and materials for assembly of plasma system. Build and test prototypes Design and testing of reactor chambers and syngas recovery systems		<i>External Financing</i>	<i>0</i>	<i>0</i>
		<i>AIA</i>	<i>0</i>	<i>0</i>

1. Preclinical testing of the 3 medical devices in the Instrumentation Laboratory/Applications for regulatory approval and final ethics from UNCST

2. Procurement of Materials, components and consumables for fabrication and deployment of Small scale food processing equipment - Fabrication of pasteurization units

3. Procurement of Materials, components and consumables for Design, Fabrication and dissemination of fabrication of mixer and carbonizer units

4. Procure Materials, components, and consumables for design, fabrication and operation of silk reeling and re-reeling machines

Vote:110 Uganda Industrial Research Institute

QUARTER 2: Revised Workplan

<i>US\$ Thousand</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)			
Output: 08 Popularization of research and technologies					
		Item	Balance b/f	New Funds	Total
	1. Participate at 2 exhibitions and 2 Trade shows				
	2. Create awareness and sensitive the public on UIRI's Research and Technology Findings and results	221005 Hire of Venue (chairs, projector, etc)	7,000	0	7,000
	3. Visits to Foreign Missions; Newsletter, Monthly Reports, Two Adverts (Independence day & Industrialization day)	221011 Printing, Stationery, Photocopying and Binding	9,548	0	9,548
	4. Outreach activities; Field Evaluation activities	227001 Travel inland	85	0	85
	5. Design and development of promotional materials 3 Training videos for for value addition, continue design support to incubatees Design of magazine, posters, brochures, flyers				
		Total	16,633	0	16,633
		<i>GoU Development</i>	<i>16,633</i>	<i>0</i>	<i>16,633</i>
		<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
		<i>AIA</i>	<i>0</i>	<i>0</i>	<i>0</i>

Capital Purchases

Output: 72 Government Buildings and Administrative Infrastructure

	Item	Balance b/f	New Funds	Total
Construction of sub structures for				
1. 1 Dairy Processing business incubation center in (central region)	312101 Non-Residential Buildings	16,172	0	16,172
2. 1 Dairy Processing business incubation center in (Western region)				
	Total	16,172	0	16,172
3. 1 Dairy Processing business incubation center in (Northern region)				
	<i>GoU Development</i>	<i>16,172</i>	<i>0</i>	<i>16,172</i>
4. 1 Dairy Processing business incubation center in (Eastern region)				
	<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
5. A Cheese Processing Pilot Plant				
6. A proposed Wine Factory in Nebbi district				
7. A proposed Fruit Juice Processing Plant for Maffaco				
8. A proposed Peanut Paste Processing Plant in Soroti district				
9. Rehabilitate Esia Mixed Farm, Adjumani				
10. A proposed Cheese processing plant at Rubale Ntungamo district for Mr. Karuhanga Justus				
11. Proposed Instrumentation Laboratory				
12. A proposed Lemon grass and Soap processing plant in Kabale industrial area for Yildi enterprises				

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

Procure Networks items which shall include Switches (24 Port), Switches (48 Port), Ethernet cables, Wireless access points, RJ45 connectors, Ethernet cards.

Vote:110

Uganda Industrial Research Institute

QUARTER 2: Revised Workplan

<i>US\$ Thousands</i>	Planned Outputs for the Quarter	Estimated Funds Available in Quarter (from balance brought forward and actual/expected releases)
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Output: 77 Purchase of Specialised Machinery & Equipment

	Item	Balance b/f	New Funds	Total
1. Laboratory Equipment - Electric dryer (Dehydrator), Pasteurizer, Extruder				
Semi-automated bottle filler, Spray dryer, Double jacketed electric steam pot kettle, Water Distillation unit, Deionizer, Laboratory blenders, TDS & Conductivity meter, Turbidity meter, pH meter, Centrifuge, Hydrogen generator for Gas chromatography, Fibertec System, Soxhtec system, Kjeltex system, Analytical balance, Laboratory refrigerators/freezer	312202 Machinery and Equipment	162,133	0	162,133
Gas Chromatography / Mass Spectrometer (GC/MS) for essential oil analysis, Chemicals & standards, Heavy duty grinder	312203 Furniture & Fixtures	3,050	0	3,050
2. Laboratory Ware - Droppers, Burettes, Pipettes, Pipette fillers, Measuring cylinders, Spatulas, Burette stands, Glass rods, Heavy duty aluminum pans, Cooled Incubator, Incubator, Incubator/Rocking Shaker, Ultra low temperature freezer, Laboratory fridge/freezer, Laboratory fridge, Precision balance, Temperature Data loggers, Thermo-hygrometer, Label printer, Laboratory stools	312214 Laboratory Equipments	14,986	0	14,986
Automated Food Pathogen detection system				
Procurement of				
Procurement of two Multimedia Computers and accessories for development of UIRI promotional videos, Photography Cameras, Video Camera Accessories				
	Total	180,169	0	180,169
	GoU Development	180,169	0	180,169
	External Financing	0	0	0
	AIA	0	0	0

GRAND TOTAL	698,132	0	698,132
Wage Recurrent	0	0	0
Non Wage Recurrent	194,128	0	194,128
GoU Development	477,570	0	477,570
External Financing	0	0	0
AIA	26,434	0	26,434