

Vote:110 Uganda Industrial Research Institute

VI: Vote Overview

(i) Snapshot of Medium Term Budget Allocations

Table V1.1: Overview of Vote Expenditures

Billion Uganda Shillings	FY2018/19 Outturn	FY2019/20		FY2020/21 Proposed Budget	MTEF Budget Projections			
		Approved Budget	Spent by End Sep		2021/22	2022/23	2023/24	2024/25
Recurrent Wage	3.720	5.326	1.283	5.326	5.326	5.326	5.326	5.326
Non Wage	1.871	6.553	0.776	6.553	7.864	9.437	11.324	13.589
Devt. GoU	7.761	1.562	0.140	1.562	1.562	1.562	1.562	1.562
Ext. Fin.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GoU Total	13.352	13.442	2.199	13.442	14.752	16.325	18.213	20.477
Total GoU+Ext Fin (MTEF)	13.352	13.442	2.199	13.442	14.752	16.325	18.213	20.477
<i>A.I.A Total</i>	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grand Total	13.582	13.442	2.199	13.442	14.752	16.325	18.213	20.477

(ii) Vote Strategic Objective

1. To undertake applied research for the development of products and optimal production processes, for Uganda's nascent industry.
2. To develop and /or acquire appreciate technology, in order to create a strong, effective and competitive industrial sector.
3. Act as a bridge between academia, government, and the private sector with respect to commercialization of innovation and research results.
4. Spearhead value addition activities in conjunction with national development priorities.
5. Lead the national effort in technology transfer and technology diffusion, to assure the development of appropriate technologies.

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V2: Past Vote Performance and Medium Term Plans

Performance for Previous Year FY 2018/19

1. UIRI Analytical Labs performed tests on over 1480 samples on a wide range of food and non-food products
2. Vaccine unit manufactured and distributed over 7600 doses of New Castle Vaccine
3. The Food R&D unit developed potato flour as a potential ingredient for the food industry
4. The ICT department Initiated development of a Tumutambule mobile App to ease public transport
5. The pilot wind solar hybrid system was set by Energy Systems Division at Ntungamo papers were submitted to the Canadian medical and biological engineering annual conference and accepted at the Ottawa from 21st to 24th May 2019. Claims for the ECGF patent application were completed.
6. Microbiology Laboratory has developed, characterized and optimized the production process of hydrolytic enzymes. 2 of the enzymes (cellulase and cutinase) are being used for bio-polishing of denim jeans.
7. The Laboratory has also developed a developed 2 Herbal Products for the treatment of wounds and cough. The products are ready for toxicity and pre-clinical studies.
8. The Pulp and Paper Technology unit developed Book covers from waste cotton as well as fiber board from Pineapple fibers

Performance as of BFP FY 2019/20 (Performance as of BFP)

1. Dairy section has developed formulations for probiotic ice cream & ice bars
2. Over 120 women, youth, and PLWD were trained in Banana Fibre extraction in four districts in Uganda in collaboration with Lanic, a UIRI incubatee
3. Trained one SME in GMP related to aflatoxin removal in peanut butter processing
4. Energy Systems Unit completed the design of solar dryers with drying capacity of 1 ton/week for farms in Lyantode and Rakai
5. Energy Systems Unit also designed a solar water heating system for reducing the energy required for gelatinization of starch before fermentation
6. Scientific Evaluation of medicinal plants for use as sunscreen chemicals in cosmetics against Ultra-violet (UV) radiation from the sun is on-going.
7. The vaccine laboratory section developed a vaccine against Infectious Bursal Disease

FY 2020/21 Planned Outputs

1. Novel products/innovations from R&D
2. Improved industrial production infrastructure, facilities and capabilities
3. SME, student and community training and outreach
4. Enhance and expand industrial and technological incubation services
5. Promote knowledge transfer
6. Create a large pool of skilled and certified professionals
7. Increase production of value added and competitive products
8. Development and production of veterinary vaccine solutions
9. Engage in Mineral beneficiation
10. Develop ICT products
11. Develop electronic and automated solutions for utilization by various sectors

Medium Term Plans

1. Create regional value addition centers to address product prevalent in specific regions
2. Promote and expand UIRI's Industrial and Technological Incubation Center and accelerate graduation of incubatees
3. Support operationalization a Machining and Manufacturing Production and Training Center for Industrial Skills Capacity Training
4. Innovate and development technologies for uptake to foster Science Technology and Innovation Development

Efficiency of Vote Budget Allocations

1. Timely utilization of resources
2. Improved project planning
3. Diligent selection of contractors
4. Training and staff capacity building
5. Ensuring value for money in procurement of goods, services and works

Vote Investment Plans

Vote:110 Uganda Industrial Research Institute

Machinery and equipment

Major Expenditure Allocations in the Vote for FY 2020/21

1. Purchase of specialized Machinery and equipment
2. Establishment of Model Value Addition Centers
3. Technology Innovation Transfer & Development
4. Research and Development
5. Support to Industrial and Technological Business Incubation

V3: PROGRAMME OUTCOMES, OUTCOME INDICATORS AND PROPOSED BUDGET ALLOCATION

Table V3.1: Programme Outcome and Outcome Indicators

Programme :	04 Industrial Research										
Programme Objective :	<ol style="list-style-type: none"> 1. To undertake applied research for the development of products and optimal production processes, for Uganda's nascent industry. 2. To develop and /or acquire appreciate technology, in order to create a strong, effective and competitive industrial sector. 3. Act as a bridge between academia, government, and the private sector with respect to commercialization of innovation and research results. 4. Spearhead value addition activities in conjunction with national development priorities. 5. Lead the national effort in technology transfer and technology diffusion, to assure the development of appropriate technologies. 										
Responsible Officer:	Prof. Charles Kwesiga										
Programme Outcome:	Industrial Product Development and Technological Advancement										
<i>Sector Outcomes contributed to by the Programme Outcome</i>											
1. Increased technological and science uptake in development											
2. More technologies adopted											
	Performance Targets										
Programme Performance Indicators (Output)	<table border="1"> <thead> <tr> <th>2019/20 Plan</th> <th>2019/20 Q1 Actual</th> <th>2020/21 Target</th> <th>2021/22 Target</th> <th>2022/23 Target</th> </tr> </thead> <tbody> <tr> <td>• Number of Research Innovations developed</td> <td style="text-align: center;">5</td> <td style="text-align: center;">1</td> <td style="text-align: center;">5</td> <td style="text-align: center;">5</td> </tr> </tbody> </table>	2019/20 Plan	2019/20 Q1 Actual	2020/21 Target	2021/22 Target	2022/23 Target	• Number of Research Innovations developed	5	1	5	5
2019/20 Plan	2019/20 Q1 Actual	2020/21 Target	2021/22 Target	2022/23 Target							
• Number of Research Innovations developed	5	1	5	5							

Table V3.2: Past Expenditure Outturns and Medium Term Projections by Programme

Billion Uganda shillings	2018/19	2019/20		2020/21	MTEF Budget Projections			
	Outturn	Approved Budget	Spent By End Q1	Proposed Budget	2021/22	2022/23	2023/24	2024/25
Vote :110 Uganda Industrial Research Institute								
04 Industrial Research	12.839	13.442	2.917	13.442	14.752	16.325	18.213	20.477
Total for the Vote	12.839	13.442	2.917	13.442	14.752	16.325	18.213	20.477

V4: SUBPROGRAMME PAST EXPENDITURE OUTTURNS AND PROPOSED BUDGET ALLOCATIONS

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Table V4.1: Past Expenditure Outturns and Medium Term Projections by SubProgramme

Billion Uganda shillings	2018/19	2019/20		2020/21	Medium Term Projections			
	Outturn	Approved Budget	Spent By End Sep	Proposed Budget	2021/22	2022/23	2023/24	2024/25
<i>Programme: 04 Industrial Research</i>								
01 Headquarters	5.636	11.880	2.777	11.880	13.190	14.763	16.651	18.915
0430 Uganda Industrial Research Institute	7.271	1.562	0.140	1.562	1.562	1.562	1.562	1.562
Total For the Programme : 04	12.907	13.442	2.917	13.442	14.752	16.325	18.213	20.477
Total for the Vote :110	12.907	13.442	2.917	13.442	14.752	16.325	18.213	20.477

N / A

Table V4.3: Major Capital Investment (Capital Purchases outputs over 0.5Billion)

FY 2019/20		FY 2020/21
Appr. Budget and Planned Outputs	Expenditures and Achievements by end Sep	Proposed Budget and Planned Outputs
Vote 110 Uganda Industrial Research Institute		
Programme : 04 Industrial Research		
Project : 0430 Uganda Industrial Research Institute		
Output: 77 Purchase of Specialised Machinery & Equipment		
All institutional machinery and equipment Purchased, installation, test running and training undertaken	1.Repairing of the silk processing machines at the Rubare silk factory in Sheema district 2.The packing machine was delivered , installed and commissioned at dairy pilot plant by Sunita Impex (PVT) Ltd in Sept 2019	Purchase of all institutional machinery and equipment, installation, test running and training
Total Output Cost(Ushs Thousand):	0.762	0.000
Gou Dev't:	0.762	0.000
Ext Fin:	0.000	0.000
A.I.A:	0.000	0.000

V5: VOTE CHALLENGES FOR 2020/21 AND ADDITIONAL FUNDING REQUESTS

Vote Challenges for FY 2020/21

- 1.Inadequate facilitation impedes technology transfer, value addition, and commercialization of innovations
- 2.Less than optimal allocation of resources.
- 3.Inadequate pool of specialized scientists and engineers.
- 4.Unfunded mandates/projects and chronic shortfalls
- 5.Inadequate funding for R & D
- 6.Lack of skilled manpower for industry and limited entrepreneurship skills within the private sector
- 7.Lack of counterpart funding for Namanve

Vote:110

Uganda Industrial Research Institute

Table V5.1: Additional Funding Requests

Additional requirements for funding and outputs in 2020/21	Justification of requirement for additional outputs and funding
Vote : 110 Uganda Industrial Research Institute	
Programme : 04 Industrial Research	
OutPut : 01 Administration and Support Services	
Funding requirement US\$ Bn : 3.600	There is a need to motivate our current staff through increasing staff salaries
OutPut : 02 Research and Development	
Funding requirement US\$ Bn : 61.250	Establishment of a fully integrated industrial materials research development and production (IMRDP
OutPut : 07 Technology, Innovation, Transfer and Development	
Funding requirement US\$ Bn : 18.300	Establishment of a Packaging Center of Excellence The project will result in improved competitiveness of Ugandan products which is in direct tandem with NDP III's main aspiration of strengthening Uganda's competitiveness for sustainable wealth creation, employment and inclusive growth.
OutPut : 72 Government Buildings and Administrative Infrastructure	
Funding requirement US\$ Bn : 26.000	Counterpart funding (Machining, Manufacturing and Industrial Skilling Training Centre)