
Vote:023 Ministry of Science, Technology and Innovation

V1: Vote Overview

I. Vote Mission Statement

To provide leadership, an enabling environment and resources for scientific research and knowledge based development for industrialization, competitiveness and employment creation for a sustainable economy

II. Strategic Objective

To provide leadership, an enabling environment and resources for scientific research and knowledge based development for industrialization, competitiveness and employment creation leading to a sustainable economy

III. Major Achievements in 2018/19

1. Innovation Fund Framework finalized. This is due for discussion in Cabinet. The framework guides the administration and governance of the Fund. It looks at supporting pupils/students (from primary school to institutions of higher learning), innovators and researchers in the informal sector with a national outlook, engaging the private sector in supporting STI. It takes cognizance of all categories of the population
2. 200 Innovators profiled across the four traditional regions (North, East, Central and West) covering formal and informal sectors. Of these 61 (30.5%) and 139 (79.5%) were women and men respectively.
3. Finalized the recruitment of staff to the Technical departments of the Ministry. By the close of Quarter one FY 2018/2019, the Ministry staffing level stood at 76%
4. Technical support provided to 80 Innovators and Researchers (26 were female and 54 male) on innovation process and management of intellectual property rights.
5. Sensitization and awareness campaigns conducted to popularize the roles and mandate of the ministry. The awareness campaigns were carried out in the Western (Kyenjojo, Masindi, Kabarole, Kamwenge, Kasese, Bunyangabu), West Nile (Arua, Moyo, Adjumani, Koboko, Nebbi), North (Gulu, Lira, Otuke, Amolatar, Dokolo) and Eastern (Soroti, Ngora, Serere, Bukedea) regions of the country. The campaigns drew district youth Councillors, Councillors representing the elderly, the PWDs, Women Councillors, technical officers and political leaders from the mentioned districts. A total of 1,056 (498 female, 558 male) people were sensitized on the roles and mandate of the Ministry. 26 of these were Persons with Disabilities.
6. Developed and Disseminated 1,500 IEC and awareness material for Intellectual property rights
7. Established national and international collaborations for instance the Ministry signed a Memorandum of Understanding with Massachusetts Institute of Technology, Government of Russia among others. The collaborations allow Ugandan Scientists to build their capacity and measure up to the international standards.
8. ST&I skills development needs and gap assessment conducted in the traditional regions of the country
9. Spearheaded the passing of the Genetic Engineering Regulatory Bill 2018.
10. ST&I Sector Development plan developed. The plan specifies the key priority interventions to be implemented by the STI sector institutions and contribute towards the attainment of Uganda's aspirations to middle income status. It is an all-inclusive plan with targeted interventions to various categories of the Ugandan population (The Youth, Children, Elderly, Women, PWDs, ethnic minorities among many others) while leaving no one behind.
11. ST&I Policy Review consultations carried out with all the 18 sectors of government, the academia, the informal sector, the private sector and the innovators.
12. Research and Innovation Program Framework developed. The Framework is a tool for supporting pupils/students (from primary school to institutions of higher learning), innovators and researchers in the informal sector with a national outlook, engaging the private sector in supporting STI. It takes cognizance of all categories of the population. It is aimed at encouraging all categories of people in the society to embrace research and innovations in solving societal challenges.
13. Recruited Staff up to 78% of the approved structure.
14. Gender and equity awareness training for Ministry staff undertaken

IV. Medium Term Plans

- 1) Mainstreaming STI in development processes across sectors. The mainstreaming efforts will be focused on ensuring that in the application of Science and Technology, every member of the Society (the children, the men, the women, youth, PWDs, people staying in hard to reach areas, ethnic minorities) are taken care of.
- 2) Countrywide sensitization, popularizing and uptake of STI related matters as a catalyst to social – economic development.

Vote:023 Ministry of Science, Technology and Innovation

The Ministry has planned for tailor made sensitization campaigns (utilizing the local dialects) in every region of the country targeting all groups of the population.

3) Establishment of STI infrastructure including:

a) Science and technology Parks,

b) Municipal Innovation and Technology hubs

c) Waste management center

4) Establishment of a space agency and Indigenous Knowledge Institute. The Indigenous Knowledge Institute will profile the various indigenous knowledge systems in the entire country. The indigenous knowledge systems will further trigger research and ensure that Uganda's indigenous knowledge is not lost

5) Operationalization of Machining and Manufacturing Industrial Skills Center at Namanve. This will serve all members of the society

6) Operationalization of BIRDIC

7) Establishment of Mineral Beneficiation center

8) Establishment of Genetic Engineering Material quality assurance laboratories.

9) Conduct Impact assessment studies of GEM products. The assessment will be aimed at ensuring that GEM products do not pose health challenges to members of the population.

10) Establishment of Biosafety and Biosecurity preparedness and response center

11) Establishment and Operationalization of Kiira Motors Plant in Jinja. At the time of completion, the plant will create both direct and indirect jobs to both those in the formal and informal sector.

12) Support offered to Researchers and Innovators

13) Undertake STI related surveys and compile comprehensive STI Statistics to aid planning

14) Support and exploit IPRs with a view to commercialization

15) Establishment of Technology Information Support Centers (TISCs) and Digital Access for Researchers and Innovators

Vote:023 Ministry of Science, Technology and Innovation

V. Summary of Past Performance and Medium Term Budget Allocations

Table 5.1: Overview of Vote Expenditures (US\$ Billion)

	2017/18 Outturn	2018/19		2019/20	MTEF Budget Projections				
		Approved Budget	Expenditure by End Dec		2020/21	2021/22	2022/23	2023/24	
Recurrent									
Wage	0.602	2.060	0.417	2.060	2.163	2.272	2.385	2.504	
Non Wage	23.520	29.354	12.563	29.206	33.587	40.305	48.366	58.039	
Devt.									
GoU	33.256	24.458	12.150	30.458	36.549	36.549	36.549	36.549	
Ext. Fin.	0.000	114.422	0.000	83.284	101.018	66.671	19.218	0.000	
GoU Total	57.379	55.872	25.129	61.724	72.300	79.126	87.300	97.093	
Total GoU+Ext Fin (MTEF)	57.379	170.295	25.129	145.008	173.318	145.796	106.518	97.093	
Arrears	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Budget	57.379	170.295	25.129	145.008	173.318	145.796	106.518	97.093	
A.I.A Total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Grand Total	57.379	170.295	25.129	145.008	173.318	145.796	106.518	97.093	
Total Vote Budget Excluding Arrears	57.379	170.295	25.129	145.008	173.318	145.796	106.518	97.093	

VI. Budget By Economic Classification

Table V6.1 2018/19 and 2019/20 Budget Allocations by Item

<i>Billion Uganda Shillings</i>	2018/19 Approved Budget				2019/20 Draft Estimates		
	GoU	Ext. Fin	AIA	Total	GoU	Ext. Fin	Total
Output Class : Outputs Provided	24.423	6.372	0.000	30.795	24.498	0.000	24.498
211 Wages and Salaries	3.535	0.950	0.000	4.485	3.253	0.000	3.253
213 Other Employee Costs	0.316	0.000	0.000	0.316	0.205	0.000	0.205
221 General Expenses	8.414	1.025	0.000	9.439	7.718	0.000	7.718
222 Communications	0.913	0.000	0.000	0.913	0.526	0.000	0.526
223 Utility and Property Expenses	3.792	0.000	0.000	3.792	3.080	0.000	3.080
224 Supplies and Services	0.415	0.000	0.000	0.415	0.155	0.000	0.155
225 Professional Services	0.500	2.550	0.000	3.050	2.760	0.000	2.760
227 Travel and Transport	5.651	1.401	0.000	7.052	6.193	0.000	6.193
228 Maintenance	0.887	0.446	0.000	1.333	0.558	0.000	0.558
282 Miscellaneous Other Expenses	0.000	0.000	0.000	0.000	0.050	0.000	0.050
Output Class : Outputs Funded	30.992	0.000	0.000	30.992	35.768	0.000	35.768
263 To other general government units	30.992	0.000	0.000	30.992	35.768	0.000	35.768
Output Class : Capital Purchases	0.458	108.050	0.000	108.508	1.458	83.284	84.741
312 FIXED ASSETS	0.458	108.050	0.000	108.508	1.458	83.284	84.741

Vote:023 Ministry of Science, Technology and Innovation

Grand Total :	55.872	114.422	0.000	170.295	61.724	83.284	145.008
Total excluding Arrears	55.872	114.422	0.000	170.295	61.724	83.284	145.008

VII. Budget By Programme And Subprogramme

Table V7.1: Past Expenditure Outturns and Medium Term Projections by Programme and SubProgramme

Billion Uganda shillings	FY 2017/18 Outturn	FY 2018/19		2019-20 Proposed Budget	Medium Term Projections			
		Approved Budget	Spent By End Dec		2020-21	2021-22	2022-23	2023-24
01 Regulation	1.244	4.009	0.814	4.677	4.525	8.128	8.213	8.218
04 Monitoring and Evaluation	0.275	0.000	0.085	0.000	0.000	0.000	0.000	0.000
05 Quality Assurance	0.182	0.000	0.029	0.000	0.000	0.000	0.000	0.000
12 Science, Technology and Innovation Policy and Regulation	0.787	0.000	0.208	0.000	0.000	0.000	0.000	0.000
15 Bio Safety and Bio Security	0.000	1.300	0.158	1.562	1.497	1.500	2.381	2.381
16 Bio Sciences and Bio Economy	0.000	1.350	0.182	1.538	1.330	1.481	2.581	3.500
17 Physical, Chemical and Social Sciences	0.000	1.359	0.153	1.577	1.698	5.147	3.251	2.337
02 Research and Innovation	1.416	143.845	5.744	113.324	134.201	101.170	53.347	30.780
06 International Collaboration	0.376	0.000	0.075	0.000	0.000	0.000	0.000	0.000
07 Research and Development	0.351	1.490	0.260	1.512	1.490	0.380	0.380	0.390
08 Technology Development	0.437	1.300	0.204	1.464	1.300	1.340	1.140	1.340
10 Infrastructure Development	0.000	1.305	0.164	1.470	1.015	3.010	2.940	2.460
14 Innovation Registration and Intellectual Property Management	0.252	1.328	0.167	1.594	1.028	1.320	1.320	1.590
1511 Kiira Motors Corporation	0.000	24.000	4.873	24.000	28.349	28.449	28.349	25.000
1513 National Science, Technology, Engineering and Innovation Skills Enhancement Project	0.000	114.422	0.000	83.284	101.018	66.671	19.218	0.000
03 Science Entrepreneurship	1.210	4.562	0.747	5.037	5.612	6.887	6.717	6.717
09 Technology Uptake, Commercialisation and Enterprise Development	0.333	1.550	0.222	1.850	1.550	1.600	1.760	2.071
10 Science, Technology and Innovation infrastructure Development	0.299	0.000	0.048	0.000	0.000	0.000	0.000	0.000
11 Skills Development	0.324	1.537	0.256	1.601	1.637	2.910	2.760	1.944
13 Small and Medium Enterprise Development and Facilitation	0.253	0.000	0.034	0.000	0.000	0.000	0.000	0.000
18 Advancement and Outreach	0.000	1.475	0.187	1.586	2.425	2.377	2.197	2.702
49 General Administration and Planning	53.509	17.878	17.825	21.971	28.980	29.611	38.240	51.378
01 Finance and Administration	20.083	14.786	9.950	13.431	17.769	20.223	25.199	28.570
03 Internal Audit	0.170	0.215	0.059	0.180	0.130	0.070	0.140	0.195
1459 Institutional Support to Ministry of Science, Technology and Innovation	33.256	0.458	7.276	6.458	8.200	8.100	8.200	11.549
19 Policy and Planning	0.000	2.419	0.539	1.902	2.882	1.218	4.702	11.063

Vote:023 Ministry of Science, Technology and Innovation

Total for the Vote	57.379	170.295	25.129	145.008	173.318	145.796	106.518	97.093
Total Excluding Arrears	57.379	170.295	25.129	145.008	173.318	145.796	106.518	97.093

VIII. Programme Performance and Medium Term Plans

Table V8.1: Programme Outcome and Outcome Indicators (Only applicable for FY 2019/20)

Programme : 01 Regulation					
Programme Objective : To Coordinate all matters pertaining to STI standards and regulation, and coordination of Bio sciences and Bio economy, Physical and Chemical Sciences					
Responsible Officer: Director, STI Regulation					
Programme Outcome: Enhance Standards for the development of Science, Technology and Innovations					
<i>Sector Outcomes contributed to by the Programme Outcome</i>					
1. Effective STI regulatory framework					
2. Improved resource utilization and accountability					
Outcome Indicators	Performance Targets				
			2019/20	2020/21	2021/22
	Baseline	Base year	Target	Projection	Projection
N / A					
SubProgramme: 15 Bio Safety and Bio Security					
<i>Output: 01 Enabling Policies, Laws and Regulations developed</i>					
Number of of MDAs supported to mainstream Research in Development Planning Processes			10		
SubProgramme: 16 Bio Sciences and Bio Economy					
<i>Output: 01 Enabling Policies, Laws and Regulations developed</i>					
Number of of MDAs supported to mainstream Research in Development Planning Processes			5	7	10
SubProgramme: 17 Physical, Chemical and Social Sciences					
<i>Output: 01 Enabling Policies, Laws and Regulations developed</i>					
Number of of MDAs supported to mainstream Research in Development Planning Processes			5	7	10
Programme : 02 Research and Innovation					
Programme Objective : To Coordinate the National Innovation System, Research and Development endeavors/activities in the country					
Responsible Officer: Director, Research and Innovation					
Programme Outcome: Increased Research, Innovations and emerging Technologies					
<i>Sector Outcomes contributed to by the Programme Outcome</i>					
1. Improved resource utilization and accountability					
2. Increased level of technology and innovation					
Outcome Indicators	Performance Targets				
			2019/20	2020/21	2021/22

Vote:023 Ministry of Science, Technology and Innovation

	Baseline	Base year	Target	Projection	Projection
• % of MDAs trained/sensitised on Science, Technology and Innovation			20%	25%	30%
N/A					
Programme :	03 Science Entrepreneurship				
Programme Objective :	To Coordinate all entrepreneurial activities, Development of Technological incubation, development of small and medium enterprise and enhancement of STI skills				
Responsible Officer:	Director, Technopreneurship				
Programme Outcome:	Increased Human Capital development in Science, Technology and Innovations				
<i>Sector Outcomes contributed to by the Programme Outcome</i>					
1. Improved resource utilization and accountability					
Outcome Indicators	Performance Targets				
			2019/20	2020/21	2021/22
	Baseline	Base year	Target	Projection	Projection
N / A					
N/A					

IX. Major Capital Investments And Changes In Resource Allocation

Table 9.1: Major Capital Investment (Capital Purchases outputs over 0.5Billion)

FY 2018/19		FY 2019/20
Appr. Budget and Planned Outputs	Expenditures and Achievements by end Dec	Proposed Budget and Planned Outputs
Vote 023 Ministry of Science, Technology and Innovation		
<i>Program : 18 02 Research and Innovation</i>		
Development Project : 1513 National Science, Technology, Engineering and Innovation Skills Enhancement Project		
Output: 18 02 72 Government Buildings and Administrative Infrastructure		
Cadastral, topographic, hydrological surveys and sites preparation undertaken		Final designs for the NSTEI-SE Project (NSTESEC & TIBIC) prepared and approved
Environmental and social management and Monitoring plans developed		Inception reports, scope of civil works under the NSTEI-SE Project (NSTESEC & TIBIC) prepared and approved
Innovation and Design Hubs established		Preliminary Engineering Designs for the NSTEI-SE Project (NSTESEC & TIBIC) prepared and approved
Manufacturing incubation hubs constructed		Schematic designs for NSTEI-SE Project (NSTESEC & TIBIC) prepared and approved
Physical infrastructural designs developed and approved		
Physical infrastructure for NSTESEC and TIBIC established		
Shell infrastructure- techno-business facilitation centres established		
Testing, centres and calibration facilities established		
Utilities and access roads constructed		
Total Output Cost(Ushs Thousand)	93,190,000	53,483,615
Gou Dev't:	0	0
Ext Fin:	93,190,000	53,483,615
A.I.A:	0	0
Output: 18 02 77 Purchase of Specialised Machinery & Equipment		

Vote:023 Ministry of Science, Technology and Innovation

Design centre machinery and equipment procured & supplied Machinery and equipment , motor vehicles procured & supplied			Equipment & machinery delivery supervised Equipment and machinery suppliers for NSTESEC and TIBIC identified and confirmed Orientation of the selected ToT participants into project deliverables undertaken Pre-shipment inspection for identified equipment & machinery undertaken Providers of Training of Trainers for Uganda instructors identified and confirmed Relevant papers and documentation for the ToT trainees obtained Relevant permits and certification for equipment and machinery obtained Relevant Ugandan candidates/participants in the ToT identified and confirmed
Production workshops and quality assurance laboratories equipped Prototyping equipment procured			
Total Output Cost(Ushs Thousand)	14,860,000	0	29,800,000
Gou Dev't:	0	0	0
Ext Fin:	14,860,000	0	29,800,000
A.I.A:	0	0	0
Program : 18 49 General Administration and Planning			
Development Project : 1459 Institutional Support to Ministry of Science, Technology and Innovation			
Output: 18 49 75 Purchase of Motor Vehicles and other Transport Equipment			
Procurement and supply of 1 Motor Vehicle for the for the Minister of Science, Technology and Innovation	Best evaluated bidder notice issue and forwarded to the solicitor General for clearance		1 Station wagon and 5 Double Cabin Pick ups procured
Total Output Cost(Ushs Thousand)	380,000	0	1,120,000
Gou Dev't:	380,000	0	1,120,000
Ext Fin:	0	0	0
A.I.A:	0	0	0

X. Vote Challenges and Plans To Improve Performance

Vote Challenges

- I. Inadequate STI Infrastructure and equipment.
- II. Inadequate support mechanisms for innovators and Researchers to pursue their ideas further
- III. Low private sector participation in R&D, technology transfer and adoption
- IV. Lack of a well-developed ST&I data collection system
- V. Asymmetric information on available technologies
- VI. Lack of appropriate legal and regulatory framework to support ST&I
- VII. Mismatch between the Curriculum and STI objectives
- VIII. Weak institutional linkages for research and innovation
- IX. Inadequate public appreciation of the strategic role of ST&I in development
- X. Absence of Guidelines on the mainstreaming of Gender and Equity issues
- XI. Lack of an institution child care centre to take care of the needs of the working nursing mothers.

Plans to improve Vote Performance

1. Strengthening intra and inter institutional coordination. This is through strengthening the STI Sector Working Group
2. Collaborations and partnerships on matters pertaining STI involving private Sector, Academia, Innovators, Universities (both Local and International)
3. Finalize the recruitment of staff to the different Technical and support departments of the Ministry
4. Undertake retooling of the Ministry to provide a conducive working environment
5. Undertake comparative studies on STI and thereafter adopt appropriate Technologies that are relevant to the socioeconomic conditions of the country

Vote:023 Ministry of Science, Technology and Innovation

6. Development of the sector strategic plan for statistics and undertaking of STI surveys to collect relevant and up to date statistics.
7. Demarcation of a space for a child care centre

XI Off Budget Support

Table 11.1 Off-Budget Support by Sub-Programme

N/A

XII. Vote Cross Cutting Policy And Other Budgetary Issues

Table 12.1: Cross- Cutting Policy Issues

Issue Type: **HIV/AIDS**

Objective :	To foster mainstreaming of HI/AIDS concerns in development plans, budgets and implementation of activities
Issue of Concern :	Limited appreciation of HIV/AIDS and the workplace
Planned Interventions :	1.Undertake capacity enhancement for staff on issues of HIV/AIDS and the workplace 2. Provide on spot support to staff living postively
Budget Allocation (Billion) :	0.300
Performance Indicators:	Number of HIV/AIDS sensitization initiatives undertaken

Issue Type: **Gender**

Objective :	To facilitate Gender and equity concerns in STI planning, processes and activities
Issue of Concern :	Limited levels of intergration of Gender and Equity concerns in development Planning and Budgeting processes and work-plans
Planned Interventions :	1.Train staff on Gender and equity responsive Budgeting 2. Ensuring equitable distribution of resources
Budget Allocation (Billion) :	0.300
Performance Indicators:	Number of staff sensitization initiatives undertaken

Issue Type: **Enviroment**

Objective :	To enhance Environmental concerns in Science, Technology and Innovation
Issue of Concern :	Low levels of integration of Environmental issues in STI
Planned Interventions :	undertake routine cleaning and maintenance of Environment
Budget Allocation (Billion) :	0.250
Performance Indicators:	Number of Environmental awareness campaigns undertaken

XIII. Personnel Information

Table 13.1 Staff Establishment Analysis

N/A

Table 13.2 Staff Recruitment Plan

N/A