
Sector: Science, Technology and Innovation

Foreword

The Science, Technology and Innovation Sector comprises of five Institutions: Ministry of Science, Technology and Innovation (MoSTI-Vote 023); Uganda National Council for Science and Technology (UNCST-Subvention); Kiira Motors Corporation (Subvention); Presidential initiative on Banana Industrial Development (Subvention); Uganda Industrial Research Institute (UIRI-Vote 110)

The Sector Contributes to the attainment of the NDP III key strategic objectives that include;

1. To promote the development of a well-coordinated science, technology and innovation eco-system
2. To develop requisite Technology & Innovation infrastructure
3. To build human resource capacity for T&I
4. To strengthen R&D capacities and applications
5. To increase development, transfer and adoption of appropriate technologies and innovations
6. To improve the legal and regulatory framework

In the current FY 2019/2020, the Sector has registered a number of achievements which include but not limited to;

1. Regional stakeholder engagements on the role of ST&I in the development process conducted
2. Scientific research and innovations profiled and documented in various regions across the country
3. Two Electric Buses Jointly Developed Kiira Motor Corporation and a consortium from China.
4. Global supply chain for Tooke products under PIBID developed and operationalized in Africa, Europe and Asia.
5. Commenced preparation of the Research and Innovation Fund Bill
6. Scientific Research and Innovation activities profiled across the country
7. Finalized preparation of the draft Ministry Client Charter
8. STI awareness engagements with National leaders, Local Governments, women, youth, PWDs, professional and research bodies
9. Baseline assessment of the current agriculture ecosystem (institutions, farmers, women and infrastructure) in the country undertaken

The Sector is therefore committed to achieving the key NDPIII objectives as be a driver to socio-economic transformation of the country

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Abbreviations and Acronyms	
NRIPF	National Research and Innovation Program Framework
MTEF	Medium Term Expenditure Framework
IPF	Indicative Planning Figure
ST&I	Science, Technology and Innovation
STEI	Science, Technology, Engineering and Innovation
STEM	Science, Technology, Engineering and Mathematics
BFP	Budget Framework Paper
SBFP	Sector Budget Framework Paper
UNCST	Uganda National Council for Science and Technology
KMC	Kiira Motors Corporation
PIBID	Presidential Initiative on Banana Industrial Development
UIRI	Uganda Industrial Research Institute
TIBICs	Technology, Innovation, Business Incubation Centers
IFMS	Integrated Finance Management System
FY	Financial Year
NDP	National Development Plan
R&D	Research and Development
SDGs	Sustainable Development Goals
IPRs	Intellectual Property Rights
IIPM	Innovation and Intellectual Property Management

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S1: Sector Overview

This section provides an overview of Sector Expenditures and sets out the Sector's contribution to the NDP, its policy objectives, and key performance issues.

(i) Snapshot of Sector Performance and Plans*

Table S1.1 Overview of Sector Expenditure (Ushs Billion)

	2018/19 Outturn	2019/20		2020/21 Proposed Budget	MTEF Budget Projections				
		Approved Budget	Spent by End Sep		2021/22	2022/23	2023/24	2024/25	
Recurrent									
Wage	5.089	7.387	1.769	7.387	7.387	7.387	7.387	7.387	
Non Wage	26.995	40.367	3.504	40.367	48.440	58.128	69.753	83.704	
Devt.									
GoU	28.783	54.950	73.684	54.950	54.950	54.950	54.950	54.950	
Ext. Fin.	0.000	83.284	0.000	60.611	63.337	18.257	0.000	0.000	
GoU Total	60.867	102.703	78.957	102.703	110.777	120.464	132.090	146.041	
Total GoU+Ext Fin (MTEF)	60.867	185.987	78.957	163.314	174.114	138.721	132.090	146.041	
A.I.A Total	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Grand Total	61.097	185.987	78.957	163.314	174.114	138.721	132.090	146.041	

(ii) Sector Contributions to the National Development Plan

The Sector is positioned to meaningfully contribute towards the attainment of Government development aspirations. This is envisaged to be undertaken through

1. Promoting the development of a well-coordinated science, technology and innovation eco-system emphasizing inclusion for all
2. Developing requisite Technology & Innovation infrastructure in various regions while taking into account the needs of the disabled
3. Build human resource capacity for Technology & Innovation especially amongst the children and youth
4. Strengthening Research & Development capacities and applications in all regions of the country
5. Increasing development, transfer and adoption of appropriate technologies and innovations amongst all categories of persons in the country
6. Improvement of the legal and regulatory framework

(iii) Medium Term Sector Policy Objectives

To create requisite systems for identifying and nurturing novel innovations and technologies and increase development, adoption, transfer and commercialization of Technologies and Innovation

(iv) Sector Investment Plans

1. Establishment of skilling centres in Ssanga and Namanve under the National Science, Technology, Engineering and Innovation Skills Enhancement Project (NSTEISEP)
2. Construction of the Kiira Motors vehicle plant assembly in Jinja
3. Retooling of the Ministry

Table S1.2 SECTOR OUTCOMES AND OUTCOME INDICATORS

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Sector Outcome : Effective STI regulatory framework

Sector Objectives contributed to by the Sector Outcome

1. Improve the STI legal and regulatory framework

Sector Outcome Indicators	Q4 Actual 2018/19	Performance Targets					
		2019/20	Base year	Baseline	2020/21	2021/22	2022/23
Proportion of STI products recommended for patent and copy rights	2%	18%	2016	2%	4%	6%	10%

Sector Outcome : Increased level of technology and innovation

Sector Objectives contributed to by the Sector Outcome

1. Enhance the integration of science and technology into the National development process

Sector Outcome Indicators	Q4 Actual 2018/19	Performance Targets					
		2019/20	Base year	Baseline	2020/21	2021/22	2022/23
Proportion of sectors embracing innovations	5%	20%	2016	0%	8%	10%	15%
Proportion of safe technologies adopted		7%	2016	8%	15%	20%	25%

Sector Outcome : Increased technological and science uptake in development

Sector Objectives contributed to by the Sector Outcome

1. Enhance R & D in Uganda

Sector Outcome Indicators	Q4 Actual 2018/19	Performance Targets					
		2019/20	Base year	Baseline	2020/21	2021/22	2022/23
Proportion of new products attributed to research	4%	17%	2016	10%	15%	20%	25%

S2: PROGRAMME OUTCOMES, OUTCOME INDICATORS AND PROPOSED BUDGET ALLOCATIONS ALIGNED TO THE NDP

Table S2.1: Programme Outcomes and Outcome Indicators Aligned to the NDP

Vote 023 :Ministry of Science, Technology and Innovation						
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						
Programme Performance Indicators	Performance Targets					
	2019/20 Plan	2019/20 Q1 Actual	2020/21 Target	2021/22 Target	2022/23 Target	

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• Percentage Compliance to National STI Standards and Guidelines	22%	0%	25%	27%	30%
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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

Sector Outcomes contributed to by the Programme Outcome

1. Increased level of technology and innovation

Programme Performance Indicators	Performance Targets				
	2019/20 Plan	2019/20 Q1 Actual	2020/21 Target	2021/22 Target	2022/23 Target
• % of MDAs trained/sensitised on Science, Technology and Innovation	20%	5%	25%	30%	50%

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

Sector Outcomes contributed to by the Programme Outcome

1. Increased technological and science uptake in development

Programme Performance Indicators	Performance Targets				
	2019/20 Plan	2019/20 Q1 Actual	2020/21 Target	2021/22 Target	2022/23 Target
• Percentage increase in transfer , adaptation and uptake of technologies	2%	0.2%	5%	10%	15%

Vote 110 :Uganda Industrial Research Institute

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

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Sector Outcomes contributed to by the Programme Outcome

1. More technologies adopted

2. Increased technological and science uptake in development

Programme Performance Indicators	Performance Targets				
	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	5

Table S2.2: Past Expenditure Outturns and Medium Term Projections by Programme

Billion Uganda shillings Programme Service	2018/19	2019/20		2020/21	Medium Term Projections			
	Outturn	Approved Budget	Releases by end Q1	Proposed Budget	2021/22	2022/23	2023/24	2024/25
Vote : 023 Ministry of Science, Technology and Innovation								
01 Regulation	1.787	4.617	0.344	4.519	4.617	4.906	5.869	5.869
02 Research and Innovation	15.569	121.673	69.910	98.857	101.638	56.558	45.164	45.164
03 Science Entrepreneurship	1.721	4.977	0.374	4.442	4.804	12.630	4.804	4.804
49 General Administration and Planning	28.437	41.278	6.130	42.055	48.302	48.302	58.040	69.726
Total for the Vote	47.515	172.545	76.758	149.872	159.361	122.396	113.878	125.563
Vote : 110 Uganda Industrial Research Institute								
04 Industrial Research	13.352	13.442	2.199	13.442	14.752	16.325	18.213	20.477
Total for the Vote	13.352	13.442	2.199	13.442	14.752	16.325	18.213	20.477
Total for the Sector	60.867	185.987	78.957	163.314	174.114	138.721	132.090	146.041

S3: Sector Challenges in addressing Gender and equity issues for FY 2020/21

- (i) Difficulty in attracting and retaining especially female Scientists.
- (ii) Absence of Gender disaggregated data for evidence based gender responsive planning
- (iii) Limited knowledge and information on the key ST&I gender and equity constraints