Vote:305 Directorate of Government Analytical Laboratory

V1: Vote Overview

(i) Snapshot of Medium Term Budget Allocations

Table V1.1: Overview of Vote Expenditures

Billion Uganda Shillings		FY2018/19	FY2019/20		FY2020/21	MTEF Budget Projections			
		Outturn	**Approved Budget**	**Spent by End Sep**	**Proposed Budget**	**2021/22**	**2022/23**	**2023/24**	**2024/25**
Recurrent	Wage	1.111	1.334	0.277	1.334	1.334	1.334	1.334	1.334
	Non Wage	7.553	7.599	1.631	7.599	9.119	10.943	13.131	15.757
Devt.	GoU	9.619	10.094	0.511	10.094	10.094	10.094	10.094	10.094
	Ext. Fin.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GoU Total		**18.283**	**19.027**	**2.419**	**19.027**	**20.547**	**22.371**	**24.559**	**27.186**
Total GoU+Ext Fin (MTEF)		**18.283**	**19.027**	**2.419**	**19.027**	**20.547**	**22.371**	**24.559**	**27.186**
A.I.A Total		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grand Total		**18.283**	**19.027**	**2.419**	**19.027**	**20.547**	**22.371**	**24.559**	**27.186**

(ii) Vote Strategic Objective

1. Strengthen the legal, policy and institutional framework of DGAL.
2. Provide quality, timely, reliable, accessible, affordable and client-centered scientific analytical, forensic and advisory services.
3. Enhance DGAL's capability for research, development and training in forensic science.
4. Promote and sustain accountability and observance of human rights at DGAL.

Vote:305 Directorate of Government Analytical Laboratory

V2: Past Vote Performance and Medium Term Plans

Performance for Previous Year FY 2018/19

1.Analyzed and reported 1489 new cases of the 2011 (74.0%) forensic cases received in the FY.
2.In total in the FY 2018/19, DGAL analyzed and reported 2067 cases of the 5559 backlog cases. This is 37.2% performance against the target of 37.5% set in the Case Backlog Reduction Strategy for FY 2018/19. DGAL developed a Case Backlog Reduction Strategy July 2018- June 2023 themed Clearance of forensic case backlog to enhance DGAL's Efficiency and Effectiveness that was approved by Ministry of Internal Affairs Senior Management.
3.The average Turn Around Time for new cases at the laboratory was reduced to 30 days from 60 days. (Toxicology laboratory from 90 days to 30days, Ballistics laboratory from 30days to 05 days, Food and Drugs to 10 days, Questioned Documents from 90days to 14 days, Pesticide Residue Laboratory reduced to 14 days, Microbiology lab to 14 days and DNA lab to 90 days).
4. Staff (02) from the DNA Laboratory attended a course in South Africa at the DNA forensics school on human identification analysis. 03 staff attained a course on Quality Management Systems. Training in quality management improves the quality planning, quality control and quality assurance systems at the laboratory. 01 staff trained in system administrative course on the Arsenal Automated Ballistics Identification System ABIS. These trainings improved the staff's analytical skills in handling the new equipment and laid grounds or dissemination of these skills to the other staff in the respective divisions/ laboratories.
5.HIV & AIDS sensitization done at the work place to staff and to clients.
6.100% response to all court summons received at the laboratory Criminalistics Regional laboratories supported in forensic analysis through conducting 04 forensic missions to the regional labs to analyze samples at the labs.
7. 506 new cases of commercial, consumer and illicit products were verified for public health concerns and reported against target of 300 cases.
8. 640 new cases of forensic monitoring and investigation to support safeguards for public health, and environmental safety analyzed and reported against target of 300 cases.
9.Forensic monitoring of Aflatoxins in cereals from Central and Eastern Uganda was undertaken and a report made. Participated in UNEP PT, NIMSA PT for aflatoxin and Texas Aflatoxin PT schemes. Six Officers participated in capacity building training by UNEP, 1 Officer attended a short course in Netherlands on Governance and food safety in International Food Chains and 2 Officers attended a training on micronutrients in fortified foods (flour, edible oil and table salt) at Uganda industrial research institute.

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

1.Analyzed and reported 386 new cases of the 664 forensic cases received in the period (58% performance). The average turnaround time of new cases at the laboratory was reduced to 30 days from 60 days.
2.The Criminalistics department analyzed and reported 496 cases backlog cases. The QCV department analyzed and reported 40 backlog cases.
3.100% response to all 23 court summons received at the laboratory.
4. 130 new cases of forensic monitoring and investigation to support safeguards for public health, food and environmental safety reported.
5.Forensic monitoring of Aflatoxins in cereals from central and Eastern Uganda was undertaken and a report made.

FY 2020/21 Planned Outputs

1.Forensic analysis of 2006 new cases and 1494 back log cases undertaken to foster administration of Justice and enhance public safety and market competitiveness.
2.Strengthened staff capacity in a variety of forensic fields and in training in operating the new scientific equipment.
3.Scientific & Forensic expert opinion tendered in courts of Law with 100% court attendance.
4. 300 cases of Commercial, consumer and illicit products verified for public health concerns and trade.
5. 300 cases of Forensic monitoring and investigation to support safeguards for public health, food and environmental safety undertaken.
6.Forensic monitoring of contaminants in environment in key areas of national interest undertaken.
Quality Management Systems (QMS) improved according to ISO 17025:2005 by participating in proficiency tests and upgrading the Laboratory Management Information System.

Medium Term Plans

Vote:305 Directorate of Government Analytical Laboratory

1.Construction of the DNA Database Infrastructure Building. Construction of the DNA databank is a multiyear activity that is phased over a five year period of the NDPIII and has a total cost of USD 27M (UGX 108Bn). This UGX 108Bn will be phased over a five year period from FY 20/21 -FY 24/25 with a breakdown of UGX 10Bn for FY 20/21, UGX 24.5Bn for FY 21/22, UGX 24.5Bn for FY 22/23, UGX 24.5Bn for FY 23/24 and UGX 24.5Bn for FY 24/25.Building a Forensic DNA Data base to support Intelligence and Crime Investigations will lead to the strengthening National Security and criminal identification.Establishment of the DNA database will not only solve the problem of criminal identification and security but also will eliminate massive arrests of suspects before evidence is obtained and this will reduce the costs of feeding the suspects in prisons.
2. Strengthen the Directorate of Government Analytical laboratories mandate through enactment of a law to manage and control forensic services as well as industrial chemicals.
3. Through the improved mandate DGAL will undertake inter-laboratory collaboration regionally and internationally acquire new scientific analytical and forensic equipment as well as replace obsolete ones to improve service delivery and strengthen the poison information center.
4. Undertake Forensic and general scientific research in a bid to contribute to crime prevention and detection will be upheld
5. DGAL will continue with quality management system implementation towards accreditation.
6. The establishment of a laboratory information management system will also improve efficiency and accountability while reducing lead time of forensic examinations

Efficiency of Vote Budget Allocations

1.Case Backlog is to be prioritized through implementation of the Case Backlog Reduction Strategy (CBRS) in the FY 2020/21 budget. . The CBRS is a five year action— from July 2018 to June 2023. Through this strategy, we anticipate to progressively reduce the forensic case backlog, by at least 75 percent by June 2020, and eventually eliminate it by June 2021—after three years of this deliberate action effective July 2018. In the course of the three years, we also commit to containing the growth of new case backlog, provided the enablers are available. Beyond the three years the Directorate will focus on stabilizing and sustaining a culture of timely case management practice; with a commitment to have new cases analysed and reported within not more than three months (90 days) of receipt. The target for FY 20/21 is 37.5% analysis of case backlog to bring the cumulative performance to 100%. However, DGAL is faced with a budget shortfall of UGX 5.6Bn for implementation of the Case Backlog Reduction Strategy. UGX 12.8 is needed for FY 20/21 to implement the strategy and only UGX 7.2Bn was budgeted for the FY 20/21.
2. Prioritize allocation of resources to the acquisition of laboratory reagents and consumables and timely provision of these reagents to enhance forensic analysis and improve turn around time and reduce case backlog.
3. Case backlog will also be reduced through addressing the staffing gaps at DGAL and acquisition of modern laboratory equipment.

Vote Investment Plans

1.Construction of Phase one of the DNA Database Infrastructure Building at a cost of UGX 3.2Bn . However, there is a shortfall of UGX 7Bn for FY 20/21. DGAL already committed to the construction of the DNA data bank building in the FY 2019/20 with UGX 3.0Bn budgeted for Procurement of consultant for design and supervision of proposed DNA databank infrastructure building and for a contractor for construction of proposed DNA data bank infrastructure building; and this activity is already underway in the current FY 2019/20.
Following the Inter Ministerial consultations on the budget for FY 2020/21 held at Ministry of Finance on the 28th November 2019, DGAL under the Ministry of Internal Affairs submitted the unfunded and underfunded priorities in line with the key result areas under the Governance and Security cluster. The Ministry of Finance noted that among the key issues and priority interventions for FY 20/21 and the medium term, under result area 2 Promoting Security and rule of law issue no 5 of increased crime rate and changing dimension of crime Concern V; that the Forensic Directorate should be strengthened i.e the capacity of DGAL in criminal case disposal and building the DNA databank. It is of key concern that DGAL is funded the UGX 7Bn shortfall for phase one. Construction of the DNA databank is a multiyear activity that is phased over a five year period of the NDPIII and has a total cost of USD 27M (UGX 108Bn). Building a Forensic DNA Data base to support Intelligence and Crime Investigations will lead to the strengthening National Security and criminal identification. Establishment of the DNA database will not only solve the problem of criminal identification and security but also will eliminate massive arrests of suspects before evidence is obtained and this will reduce the costs of feeding the suspects in prisons.This UGX 108Bn will be phased over a five year period from FY 20/21 -FY 24/25 with a breakdown of UGX 10Bn for FY 20/21, UGX 24.5Bn for FY 21/22, UGX 24.5Bn for FY 22/23, UGX 24.5Bn for FY 23/24 and UGX 24.5Bn for FY 24/25.

2.Procure scientific laboratory equipment such as GC for Toxicology, and assorted scientific analytical laboratory equipment that can build institutional capacity to meet the emerging needs of the Oil and Gas Industry as well as increasing clientele demand for the institutions services among others.

Major Expenditure Allocations in the Vote for FY 2020/21

Vote:305   Directorate of Government Analytical Laboratory

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V3: PROGRAMME OUTCOMES, OUTCOME INDICATORS AND PROPOSED BUDGET ALLOCATION

Table V3.1: Programme Outcome and Outcome Indicators

Programme :	**13 Forensic and General Scientific Services.**
Programme Objective :	Strengthened Forensic Science for Public Safety and Administration of Justice.
Responsible Officer:	Director
Programme Outcome:	**Strengthened Forensic Science for Public Safety and Administration of Justice.**

Sector Outcomes contributed to by the Programme Outcome

1. Infrastructure and access to JLOS services enhanced

	Performance Targets				
Programme Performance Indicators (Output)	**2019/20 Plan**	**2019/20 Q1 Actual**	**2020/21 Target**	**2021/22 Target**	**2022/23 Target**
• Percentage of backlog cases analyzed	37.5%	16.6%	37.5%	37.5%	37.8%

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 :305 Directorate of Government Analytical Laboratory								
13 Forensic and General Scientific Services.	17.550	19.027	2.404	19.027	20.547	22.371	24.559	27.186
Total for the Vote	**17.550**	**19.027**	**2.404**	**19.027**	**20.547**	**22.371**	**24.559**	**27.186**

V4: SUBPROGRAMME PAST EXPENDITURE OUTTURNS AND PROPOSED BUDGET ALLOCATIONS

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

Billion Uganda shillings	2018/19	2019/20	2020/21	**Medium Term Projections**

Vote:305 Directorate of Government Analytical Laboratory

	Outturn	Approved Budget	Spent By End Sep	Proposed Budget	2021/22	2022/23	2023/24	2024/25
Programme: 13 Forensic and General Scientific Services.								
0066 Support to Internal Affairs (Government Chemist)	9.619	10.094	0.511	10.094	10.094	10.094	10.094	10.094
02 Regional Forensic Laboratories	0.146	0.231	0.027	0.231	0.551	1.375	2.063	2.489
04 Office of the Director (Administration and Support Services)	3.029	3.469	0.672	3.469	4.469	4.469	4.469	5.469
05 Criminalistics and Laboratory Services	4.492	4.340	1.074	4.340	4.340	5.340	5.840	7.040
06 Quality and Chemical Verification Services	0.528	0.892	0.119	0.892	1.092	1.092	2.092	2.092
Total For the Programme : 13	*17.815*	*19.027*	*2.404*	*19.027*	*20.547*	*22.371*	*24.559*	*27.186*
Total for the Vote :305	**17.815**	**19.027**	**2.404**	**19.027**	**20.547**	**22.371**	**24.559**	**27.186**

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 305 Directorate of Government Analytical Laboratory		
Programme : 13 Forensic and General Scientific Services.		
Project : 0066 Support to Internal Affairs (Government Chemist)		
Output: 72 Government Buildings and Administrative Infrastructure		
Procurement of consultant for design proposed DNA databank infrastructure building. Procurement of a contractor for construction of proposed DNA data bank infrastructure building. Electrical re wiring of the old lab	Initiated procurement for consultant for design proposed DNA data bank infrastructure building. Initiated designing of the plans for the DNA databank infrastructure building	Phase one construction of the DNA Databank infrastructure building. Renovation of the Water and Environment laboratory
Total Output Cost(Ushs Thousand):	**3.000**	**0.000**	**3.500**
Gou Dev't:	3.000	0.000	3.500
Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000
Output: 76 Purchase of Office and ICT Equipment, including Software		
Acquire computers for main laboratory. Software for case management system, infrastructure to support system and digitalization of records and exhibits storage. Laboratory network for DNA database	Initiated procurement for procurement of computers for the main laboratory	Acquire computers for main laboratory and regional laboratories. Phase two of Digitalization of records and exhibits storage.
Total Output Cost(Ushs Thousand):	**0.586**	**0.000**	**0.200**
Gou Dev't:	0.586	0.000	0.200

Vote:305 Directorate of Government Analytical Laboratory

Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000

Output: 77 Purchase of Specialised Machinery & Equipment

Acquire specialized machinery for equipping the main and regional forensic laboratories (Raman spectrometer, GC(ECD/FID, Cold room,Comparison Microscope,Autotitrimeter, Mobile DNA Analyser,Solid Phase Extraction,Assorted small equipment)	Contracts awarded for supply, delivery, installation, and training on usage of Horizontal Autoclave and contract awarded for repair and servicing of Shimadzu Gas Chromatograph coupled with FID/FTD.	Acquire specialized machinery for equipping the main and regional forensic laboratories (GC for Toxicology,Assorted small equipment for Food and drugs, Toxicology, Ballistics, DNA and Water and Environment lab
Total Output Cost(Ushs Thousand):	**3.918**	**0.422**	**3.918**
Gou Dev't:	3.918	0.422	3.918
Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000

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

Vote Challenges for FY 2020/21

1.Inadequate number of staff to deploy in Regional Laboratories. The regional laboratories are grossly understaffed and this affects the laboratory analysis and exhibit collection at the regional laboratories. Out pf the approved structure of 124 positions, only 58 are filled and there are 66 vacant positions. There is a wage shortfall of UGX 1.3Bn in the wage budget that is needed to fill these 66 vacant positions in the structure. The wage provided for DGAL is UGX 1.33Bn and yet the total wage needed is UGX 2.6Bn. Case backlog reduction at the lab needs adequate staffing for timely forensic analysis to be undertaken.
2.The laboratories at DGAL headquarters lack adequate office space since the laboratory space us used for both laboratory analysis and as office space. This creates an un conducive work environment whereby the staff inhale the chemicals and fumes in the laboratory since the laboratory space doubles as the office space. There is need for more office space for the forensic scientists
3.Inadequate capacity (equipment and training) for analysis of oils and fuels. This limits DGAL's capacity in the analysis of these samples and this gap needs to be addressed by acquiring the necessary and appropriate equipment for analysis of oils and fuels.

Table V5.1: Additional Funding Requests

Additional requirements for funding and outputs in 2020/21	Justification of requirement for additional outputs and funding
Vote : 305 Directorate of Government Analytical Laboratory	
Programme : 13 Forensic and General Scientific Services.	
OutPut : 01 Forensic and General Scientific Services,	
Funding requirement UShs Bn : **5.600**	The case backlog strategy target of 100% clearance of backlog may not be achieved.
OutPut : 02 Scientific, Analytical and Advisory Services	
Funding requirement UShs Bn : **1.800**	Further slows the process of accreditation. The accreditation of DGAL is long over due and it is a requirement for compliance with international best practices for National Reference laboratories. The benefits of accreditation include; unquestionable test results, international recognition hence acceptability of the results during administration of justice.
OutPut : 03 Coordination, Monitoring and Supervision	

Vote:305 Directorate of Government Analytical Laboratory

Funding requirement UShs Bn : **1.225**	Staffing is key in the promise of 100% clearance of backlog target of the case backlog strategy and without the 66 vacant positions filled, this target will be difficult to achieve.
OutPut : 05 Policy, Planning and Budgeting	
Funding requirement UShs Bn : **1.500**	Operationalization and implementation of the guidelines of the Forensic Evidence and DNA database bill will be hindered by the challenge of funds
OutPut : 72 Government Buildings and Administrative Infrastructure	
Funding requirement UShs Bn : **7.000**	The construction will still commence but the progress of the construction will be limited to as far as the funds provided allow. This will be initiation of the first phase of construction.