

Vote: 125 National Animal Genetic Res. Centre and Data Bank

Vote Summary

VI: Vote Overview

This section sets out the Vote Mission, Strategic Objectives, and provides a description of the vote's services

(i) Snapshot of Medium Term Budget Allocations

Table V1 below summarises the Medium Term Budget allocations for the Vote:

Table V1.1: Overview of Vote Expenditures (US\$ Billion)

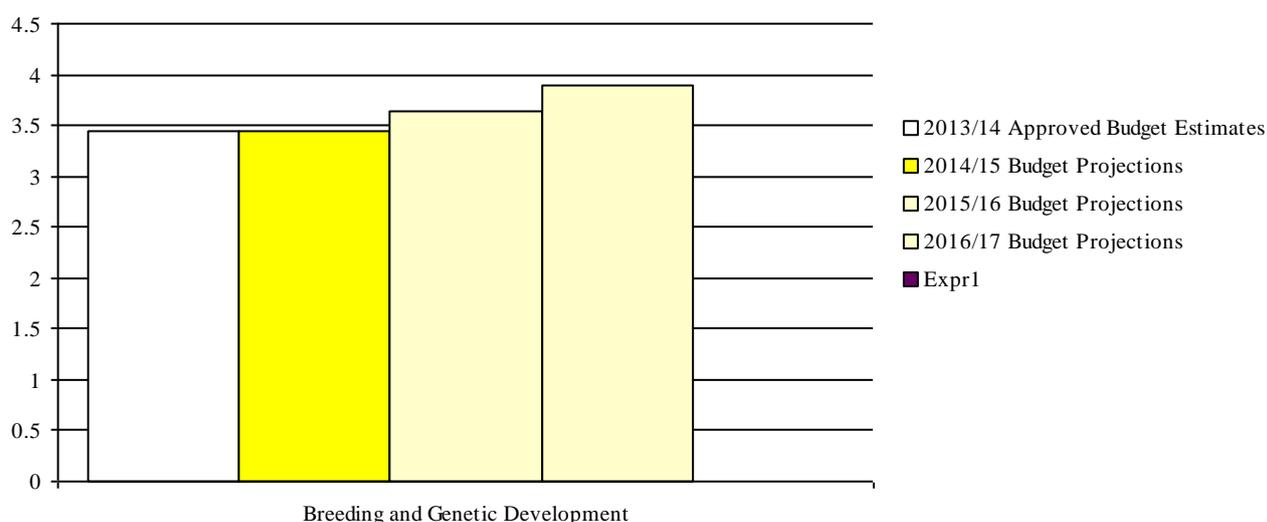
	2012/13 Outturn	2013/14		MTEF Budget Projections		
		Approved Budget	Spent by End Dec	2014/15	2015/16	2016/17
<i>(i) Excluding Arrears, Taxes</i>						
Recurrent Wage	0.000	1.400	0.778	1.400	1.400	1.554
Recurrent Non Wage	0.000	2.050	1.008	2.050	2.245	2.335
Development GoU	0.000	0.000	0.000	0.000	0.000	0.000
Development Ext.Fin	0.000	0.000	0.000	0.000	0.000	0.000
GoU Total	0.000	3.450	1.786	3.450	3.645	3.889
Total GoU+Donor (MTEF)	0.000	3.450	1.786	3.450	3.645	3.889
<i>(ii) Arrears and Taxes</i>						
Arrears	0.000	0.000	0.000	0.000	N/A	N/A
Taxes**	0.000	0.000	0.000	0.000	N/A	N/A
Total Budget	0.000	3.450	1.786	3.450	N/A	N/A
<i>(iii) Non Tax Revenue</i>						
	0.000	0.600	0.050	0.600	0.800	1.000
Grand Total	0.000	4.050	1.836	4.050	N/A	N/A
Excluding Taxes, Arrears	0.000	4.050	1.836	4.050	4.445	4.889

* Donor expenditure data unavailable

** Non VAT taxes on capital expenditure

The chart below shows total funding allocations to the Vote by Vote Function over the medium term:

Chart V1.1: Medium Term Budget Projections by Vote Function (US\$ Bn, Excluding Taxes, Arrears)



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(ii) Vote Mission Statement

The Vote's Mission Statement is:

To play a leading role in establishing a comprehensive and Sustainable National Animal Breeding Programme in Uganda.

(iii) Vote Outputs which Contribute to Priority Sector Outcomes

The table below sets out the vote functions and outputs delivered by the vote which the sector considers as contributing most to priority sector outcomes.

Table V1.2: Sector Outcomes, Vote Functions and Key Outputs

V2: Past Vote Performance and Medium Term Plans

This section describes past and future vote performance, in terms of key vote outputs and plans to address sector policy implementation issues.

(i) Past and Future Planned Vote Outputs

2012/13 Performance

Performance highlights of strategic key outputs for Vote 125 in FY 2012/2013

include;

ASSISTED REPRODUCTIVE TECHNOLOGIES (ARTS)

- Fifteen thousand five hundred twenty (15,520) Liters of liquid nitrogen produced
- Twenty nine thousand thirty (29,030) doses of semen produced and distributed
- Three thousand ninety one (3,091) farmers trained in improved animal husbandry practices
- Two thousand four hundred twenty four (2,424) students trained in modern animal husbandry practices

POULTRY GENETICS DEVELOPMENT

- Eighty four thousand five hundred (84,500) commercial Kuroiler DOCs imported
- Fifty thousand (50,000) Kuroiler hatching eggs imported

DAIRY AND BEEF

- Seven thousand one hundred ninety eight (7,198) Dairy and beef calves born
- Four thousand one hundred fifty two (4,152) cows synchronized and inseminated
- One thousand two hundred thirty two (1,232) farmers profiled and sensitized in preparation for recruitment into the Open Nucleus Breeding Scheme (ONBS)
- 2 Valley tanks desilted at Maruzi and Nshara ranches.
- Two Breeders platforms/workshops held with Reline (Renaissance Livestock Farmers Network) to discuss National Breeding program.

SMALL RUMINANTS AND NON-RUMINANTS

- One thousand nineteen (1,019) goat kids born
- Seventy (70) piglets born

HEAD QUARTERS

- 2(Two) Board meeting held
- Ten (10) staff trained in short courses.

PASTURE AND FEEDS

- One thousand two (1,200) hundred bales of hay produced
- Five (5) tones of silage produced

Preliminary 2013/14 Performance

Performance highlights for the NAGRC&DB till end of September are as below;

1). HEADQUARTERS-NAGRC&DB

- 75% of the planned for activities/duties by staff were executed;
- 40% of the missing key positions filled;

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•Improved staff welfare through:-

a.Acquiring a staff medical insurance scheme

b.Timely release and payment of staff salaries

•All staff responsible for successful execution/supporting of an efficient and effective accounting system trained in the principles of operationalizing the Integrated Financial Management System (IFMS);

•Internal Audits and Controls have been strengthened;

•One M.O.U was signed between NAGRC&DB and NAADS where quality genetic materials will be available and accessible to farmers;

2). DAIRY CATTLE

•One Breeders workshop supported. The Reline farmers organized it and NAGRC&DB were facilitators;

•Fifty four (54) dairy cross bred calves born'

•Twenty eight (28) pure bred dairy calves born;

3). BEEF CATTLE

•One hundred twenty nine (129) -Cross bred beef calves produced;

•One hundred fifty nine (159) steers produced;

•One hundred (100) indigenous calves born;

•One (1) Farmer for a on indigenous genetics attended;

4). POULTRY

•Twelve radio Talk shows were held by the ED and Nutritionist at CBS FM sensitizing farmers about best poultry and Livestock management practices and as a means of addressing poverty.

•A total of 37,568 day old Kuroiler chicks were hatched and distributed to commercial farmers and mother units in the different parts of the country.

•Two gender and community outreach education work -shops on the Kuroiler chicken were conducted in Luwero and Gulu Districts. Seven hundred participants attended (Youth, elderly and women).

5). SMALL RUMINANTS &NON RUMINANTS

•Fifty 50 crossbred castrates produced.

•Two hundred eighty eight (288) kids born

•Forty five (45) Camborough piglets born

•Two pig houses at Njeru and Livestock Experimental station (LES) undergoing repair.

6). PASTURE AND FEEDS

•Four (4) acres of soya bean planted at Njeru Stock Farm.

•One hundred and fifteen (115) acres of maize planted at the different NAGRC&DB farms.

•One thousand one hundred twenty (1,120) Bales of hay produced at the different NAGRC&DB farms.

•Sixty (60) acres of grazing area renewed/restored through bush clearing and mechanized slashing.

•Twenty three (23) tons of silage produced at the different NAGRC&DB Farms.

•Ten (10) tons of poultry feeds processed

8). NATIONAL ANIMAL DATA BANK

•One meeting held with the Commissioner with regards to the national animal identification system,

•Streamlined the recording systems at Nshara, Kasolwe , Lusenke and Bulago farms

•At Sanga, trained the records assistant on how to capture herd/flock dynamics, milk

•Took stock of all the animals at the farm and identified those without tags and tagged them

•200 ancestral records compiled

•Installed Inter-herd at Njeru stock farm, created a new user account for data entry

•Identified 10 farmers to be recruited into the ONBS for performance testing and progeny testing

•Milk yield data for LES, Njeru, and Rubona Compiled

•Distributed 1,136 recording card to; LES, Bull Stud, Bulago, Lusenke, Njeru, Kasolwe, Ruhengyere, Sanga, Nsaara, and AI technicians from western Uganda

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- A semen inventory maintained and up graded
- 10). ASSISTED REPRODUCTIVE TECHNOLOGIES (ARTS)
- Twenty six (26) Artificial Insemination technicians trained
- Five thousand three hundred twenty two (5,322.6) liters of liquid of nitrogen produced, a Total of four thousand one hundred and two (4,102) liters sold.
- Nine hundred fifty (950) Doses of semen produced at the NAGRC&DB Bull stud
- Twenty four thousand (24,000) doses of imported semen procured.

Table V2.1: Past and 201/12 Key Vote Outputs*

<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2013/14 Spending and Outputs Achieved by End Dec	2014/15 Proposed Budget and Planned Outputs
Vote: 125 National Animal Genetic Res. Centre and Data Bank			
<i>Vote Function: 0156 Breeding and Genetic Development</i>			
<i>Vote Function Cost</i>	<i>US\$ Bn:</i>	<i>4.050 US\$ Bn:</i>	<i>1.786 US\$ Bn: 4.050</i>
Cost of Vote Services:	<i>US\$ Bn:</i>	4.050 US\$ Bn:	1.786 US\$ Bn: 4.050

* Excluding Taxes and Arrears

2014/15 Planned Outputs

1. One hundred fifty (150) Calves from pure dairy breeds (Friesian, Gurney, Jersey, Brown Swiss and Ayrshire);
2. One thousand three hundred (1,300) cross bred calves born from both Dairy and Beef cattle;
3. six hundred (600) calves from the elite local cattle herd shall be produced;
4. a minimum of 840,000 commercial Kuroiler chicks shall be produced;
5. cross bred goats will be 1,000;
6. piglets born shall be 200;
7. Fifty even thousand three hundred (57,300) doses of semen for mainly dairy breeds locally shall be produced.
8. four hundred twenty (420) tons of corn;
9. six thousand (6,000) bales of hay produced and;
10. Three hundred (300) tons of quality animal feeds.

Table V2.2: Past and Medum Term Key Vote Output Indicators*

<i>Vote Function Key Output Indicators and Costs:</i>	2012/13 Outturn	2013/14 Approved Plan	Outturn by End Dec	MTEF Projections		
				2014/15	2015/16	2016/17
Vote: 125 National Animal Genetic Res. Centre and Data Bank						
<i>Vote Function: 0156 Breeding and Genetic Development</i>						
<i>Vote Function Cost (US\$ bn)</i>	<i>0.000</i>	<i>4.050</i>	<i>1.786</i>	<i>4.050</i>	<i>4.445</i>	<i>4.889</i>
Cost of Vote Services (US\$ Bn)	0.000	4.050	1.786	4.050	4.445	4.889

Medium Term Plans

Over the next five years, with proper funding, personnel, and management, NAGRC&DB plans to achieve on the following medium term plans;

1. Continue developing the National Livestock Registry and National Databank,
2. Establish regional wise/NAGRC&DB center farms based national herd/milk/beef recording schemes,
3. Continue promoting and fostering Breeding Associations and Breed Societies,
4. Establish and maintain performance and progeny-testing schemes,
5. Provide specialized training in Assisted Reproductive Technologies (ARTs) to service providers,
6. Establish state of the art Gene-Depository and Evaluation Centre,
7. Establish new NAGRC&DB Satellite Centers for breeding extension,

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8. Establish Fish breeding centers on all NAGRC&DB farms with water bodies,
9. Expand the National Gene Bank,
10. Conserve indigenous livestock genetic resources.
11. Secure land titles and property under NAGRC & DB,
12. Established livestock breeding programs,
13. rehabilitated farm structures & scheduled repair/maintenance of equipment,
14. Collaborative research in animal breeding and genetics

(ii) Efficiency of Vote Budget Allocations

The mandate of the National Animal Genetic Resources Center and Data Bank (NAGRC&DB) is to spear head livestock genetics improvement through establishing an efficient and effective sustainable national animal breeding program. The plan to improve efficiency and value for money over the medium term, is by; improving staff motivation for effective execution of their duties through ensuring improved welfare of the institution's staff, through the Accounting Officer and Human Resource Manager emphasize timely execution of planned activities, timely accountability for monies requested, ensuring that all the institution's procurements are handled as per the PPDA laws, timely reporting on executed activities. last but not least, the Accounting Officer to ensure that the Technical Manager Production, Technical Manager Breeding, Internal Auditor and vote controllers in their respective capacities carry out their monitoring, supervisory and coordinating responsibilities.

Table V2.3: Allocations to Key Sector and Service Delivery Outputs over the Medium Term

The National Animal Genetic Resources center and Data Bank (NAGRC&DB) is mandated to establish a cost effective breeding services delivery system in Uganda that should lead to improved productivity and production of the farmers' animals. The institution works towards fulfilling delivery of this public good through implementing a holistic ARTs delivery model that involves procurement, production and distribution of liquid nitrogen, frozen semen and associated consumables (gloves, sheath, etc.). The institution is also responsible for training of the breeding technologies service providers.

The costing for the key service delivery outputs that include; liquid nitrogen, semen, hormones is based on the following assumptions;

- a). Liquid nitrogen; due to the prevailing high cost of electricity and the evaporation nature of liquid nitrogen, it has been worked out through time that a liter of liquid nitrogen at a government subsidized price should cost UGX 6,000, whereas;
- b) A straw of semen that is also dependent on the cost of maintaining the breeding bulls at the bull stud, the subsidized market price is UGX 4,000.
- c). Hormones used in controlled breeding (synchronization) to rapidly multiply both dairy and beef genetics is dependent on the prevailing market prices. The fact that NAGRC&DB does not produce hormones, their supply is dependent on the imports from contracted international service providers. The price of one dose as sold to the farmers is UGX 50,000.

Table V2.4: Key Unit Costs of Services Provided and Services Funded (Shs '000)

Unit Cost Description	Actual 2012/13	Planned 2013/14	Actual by Sept	Proposed 2014/15	Costing Assumptions and Reasons for any Changes and Variations from Plan
<i>Vote Function:0156 Breeding and Genetic Development</i>					
Hormones	200,000	200,000		205,000	1. There is a lot of vigorous research aimed at improving potency of animal drugs and therefore influences prices of the improved ones. 2. The procurement processes, nature of the procurement and the periods (bid validity periods) they take.

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Unit Cost Description	Actual 2012/13	Planned 2013/14	Actual by Sept	Proposed 2014/15	Costing Assumptions and Reasons for any Changes and Variations from Plan
Acaricides	89,888	90,000	90,439	91,136	1. There is a lot of vigorous research aimed at improving potency of animal drugs and therefore influences prices of the improved ones. 2. The procurement processes, nature of the procurement and the periods (bid validity periods) they take.
A drum of Mollases	200,000	200,000		219,178	The procurement processes, nature of the procurement and the time period (bid validity periods) they take.

(iii) Vote Investment Plans

All the capital purchases are long term investments to help in sustainable solving of the existing national service delivery and production challenges. This therefore justifies the high level of money invested/allocated to each one of them. On average all the capital investments are costing a billion shillings and above.

Table V2.5: Allocations to Capital Investment over the Medium Term

Billion Uganda Shillings	(i) Allocation (Shs Bn)				(ii) % Vote Budget			
	2013/14	2014/15	2015/16	2016/17	2013/14	2014/15	2015/16	2016/17
Consumption Expenditure(Outputs Provided)	4.1	4.0	4.4	4.9	100.0%	100.0%	100.0%	100.0%
Grand Total	4.1	4.0	4.4	4.9	100.0%	100.0%	100.0%	100.0%

The National Animal Genetic Resources Center and Data Bank (NAGRC&DB), investments during the FY 2014/2015 include; Rehabilitation of the hatchery unit at the Livestock Experimental station, procurement of three (3) tractors and related implements together with two (2) double cabin vehicles, installation of a new Liquid Nitrogen Plant at NAGRC&DB head office with production capacity of 80 liters per hour. This is the biggest in east Africa. Rehabilitation of The embryo transfer Laboratory at Livestock experimental station, fencing off land equivalent to 20 square miles at the different NAGRC&DB farms. Stocking the poultry breeding unit at LES with 5,000 Kuroiler parent stock birds. Maintaining over 8,000 dairy and beef animals at the different NAGRC&DB Farms, Installation of animal feeds amonofication center/s at Les. Establishing fodder banks and pasture fields at the different NAGRC&DB farms.

Table V2.6: Major Capital Investments

(iv) Vote Actions to improve Priority Sector Outomes

The mandate of the National Animal Genetic Resources Center and Data Bank (NAGRC&DB) is to spear head livestock genetics improvement through establishing an efficient and effective sustainable national animal breeding program. The plan to improve efficiency and value for money over the medium term, is by; improving staff motivation for effective execution of their duties through ensuring improved welfare of the institution's staff, through the Accounting Officer and Human Resource Manager emphasize timely execution of planned activities, timely accountability for monies requested, ensuring that all the institution's procurements are handled as per the PPDA laws, timely reporting on executed activities. last but not least, the Accounting Officer to ensure that the Technical Manager Production, Technical Manager Breeding, Internal Auditor and vote controllers in their respective capacities carry out their monitoring, supervisory and coordinating responsibilities.

Table V2.7: Priority Vote Actions to Improve Sector Performance

2013/14 Planned Actions:	2013/14 Actions by Sept:	2014/15 Planned Actions:	MT Strategy:
Sector Outcome 1: Agricultural Production and Productivity			

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2013/14 Planned Actions:	2013/14 Actions by Sept:	2014/15 Planned Actions:	MT Strategy:
Vote Function: 01 56 Breeding and Genetic Development			
VF Performance Issue: <i>Animal feed resources development Land encroachment.</i>			
		<ul style="list-style-type: none"> - To develop and submit an additional budget that will facilitate activities of surveying all pieces of government land and obtain land titles for each one of them. - Request for more funding to establish more fodder banks. 	<ul style="list-style-type: none"> - Continue Negotiating with encroachers in a bid to regain the encroached areas. - Continue opening up more land for planting pasture fields. Submit proposals for restocking of government farms.
Sector Outcome 3: Improvement in the enabling environment & Institutional strengthening			
Vote Function: 01 56 Breeding and Genetic Development			
VF Performance Issue: <i>Inadquate funding in areas of wage and non wages.</i>			
		<ul style="list-style-type: none"> - Continue requesting/writing to the Ministry of Public Service to consider the institution's request since full allocation of the required wage bill will enable NAGRC&DB recruit and fill up all the missing positions affecting vote performance. 	<ul style="list-style-type: none"> To effectively and efficiently utilise the available technical and support staff base to ensure optimum vote performance.
VF Performance Issue: <i>Infrastructure development (establishment and rehabilitation & restocking).</i>			
		<ul style="list-style-type: none"> - Develop and submit to the Ministry of Finance Planning and Economic Development (MOFPED) a request to consider funding the institution's infrastructure; including government farms, restocking, procurement of vehicles, farm machinery, etc. 	<ul style="list-style-type: none"> The institution through the estates department will Continue maintaining existing infrastructure.

V3 Proposed Budget Allocations for 2014/15 and the Medium Term

This section sets out the proposed vote budget allocations for 2014/15 and the medium term, including major areas of expenditures and any notable changes in allocations.

Table V3.1: Past Outturns and Medium Term Projections by Vote Function*

	2012/13 Outturn	2013/14		MTEF Budget Projections		
		Appr. Budget	Spent by End Sept	2014/15	2015/16	2016/17
Vote: 125 National Animal Genetic Res. Centre and Data Bank						
0156 Breeding and Genetic Development	0.000	4.050	0.784	4.050	4.445	4.889
Total for Vote:	0.000	4.050	0.784	4.050	4.445	4.889

(i) The Total Budget over the Medium Term

NAGRC&DB Programs proposed budget allocations for 2014/2015 and medium term areas follows;
 program 1(headquarters) – UGX 600,000,000; Program 2 (Dairy genetics) – UGX 650,000,000; Program 3 (Beef genetics) – UGX 650,000,000; Program 4 (Poultry) – UGX 200,000,000; Program 5 (Fish genetics) UGX 200,000,000; Program 6 (Pasture and Feeds) – UGX 400,000,000; Program 7 (National Data Bank)- UGX 100,000,000, Program 9 (Small Ruminants and Non Ruminants) – UGX 200,000,000; Program 10

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(Assisted Reproductive Technologies) - UGX 600,000,000.

(ii) The major expenditure allocations in the Vote for 2014/15

The NAGRC&DB mandate is to spearhead establishment and operationalization of a sustainable animal breeding program in the country. Therefore, the highest allocations were prioritized on activities that impact directly on performance of the institution's mandate. Such activities include; livestock breeding, conservation, multiplication and their supporting activities.

In regard to the 2013/2014 funding allocation to NAGRC&DB; contract staff salaries were allocated UGX 1,400,000,000. The highest allocation under the non-wage allocations were on; Medical and Agricultural supplies, this took the greatest allocation of UGX 752,540,000, followed by allowances that was allocated UGX 284,495,000. maintenance others was allocated UGX 284,125,000, fuel, lubricants and oil was allocated UGX 168,800,000, NSSF Contribution by NAGRC&DB (10% of the wage bill) UGX 130,180,000, Maintenance of vehicles UGX 65,000,000, electricity UGX 60,000,000, staff training UGX 59,499,000, travel inland UGX 41,228,000, Information and communication technology 29,412,000/=, telecommunication 29,995,000/=,travel abroad 25,500,000/=,printing, stationery, photocopy & binding 24,600,000/=,workshops and seminars 24,527,000/=,water 18,000,000/= and welfare with UGX 17,200,000.

(iii) The major planned changes in resource allocations within the Vote for 2014/15

In order For the National Animal Genetic Resources Center and Data Bank (NAGRC&DB) to perform optimally and contribute significantly to the successful performance of the Agricultural sector in FY 2014/2015, its prudent that the underfunded and yet key areas contributing to the institution's performance be addressed and funding increased. Among the most important areas where resource allocation changes shall occur include;

1). Maintenance of valley tanks, these valley dams are the major sources of water to the farms and ranches, Lack of adequate amounts of water would lead to death of animals. This challenge needs to be addressed immediately.

2) Maintenance of the farms infrastructure. There is a big challenge of the need to rehabilitate the infrastructure of government farms/ ranches under NAGRC&DB. The existing infrastructure is more than thirty (30) years old and therefore requires extra funding to improve on them.This infrastructure includes: fences, farm roads, fire breaks, residential farm managers and workers houses, water and watering facilities and animal dips. There is also need to establish woodlots on all NAGRC&DB farms.

3) Restocking of the NAGRC&DB farms and ranches. His Excellence the President of Uganda gave a directive in 2011 to restock Aswa ranch with 5000 animals (UGX 25,000,000,000) and Rubona Stock farm which were affected by war. The proposals were submitted by NAGRC&DB to relevant authorities; currently we are still waiting for the positive response.

NB. The supplementary of UGX 2,000,000,000 in F/Y 2013/2014. NAGRC&DB, has requested the above mentioned supplementary for mainly the purpose of rehabilitation and restocking of Aswa and Ruhengyere ranches with 1,000 breeding animals. The purpose of this intervention is aimed at contributing to the Governments drive to avail quality dairy producing animals to resource poor farmers especially in areas where cattle kept or where farmers lost animals due to the different times the country went through. Once the above mentioned supplementary is granted, NAGRC&DB would like to request that this funding is maintained in the coming financial years. This request is to make sure that the programme once embarked on is sustained as the animals procured would require this funding for proper management (including production and multiplication), in order to avail quality stock to the targeted farmers in the country.

4) Land encroachment, since most of the land is not fenced; the institution is encountering encroachment and the related implications.

5) Transport. Currently NAGRC&DB is facing a big challenge of transport since all its vehicles are beyond five years and are over 250, 0000 KM. Ministry of Works and Transport requires boarding off these

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vehicles. The institution has a very limited budget with no capital development budget and routine monitoring and evaluation (M&E) of farms which are so distant from head office.

6) Fully operationalize the institution organo structure which was approved in 2005 and recommended its funding by Ministry of Finance. Since that time the structure has never been fully funded to recruit and retain the required human resource despite a UGX 1,000,000,000 increase on NAGRC&DB wage bill this left a shortfall of UGX 479,848,000. Lack of adequately funding scientists has led to the organization losing two (2) senior staff with PhD in the last four years. These staff had been previously trained under the organization.

7) Frequent breakdown of the Liquid Nitrogen Plant due to the lack adequate funds for repairs and maintenance has put some breeding activities at a standstill in some districts and a reduction in others. This is because, liquid Nitrogen plays a pivotal role in preservation of semen, and in turn this has led to a decline in numbers of Artificial Inseminations (AI) carried out.

8) Mechanization. There are inadequate tractors and associated implements for the organization yet NAGRC&DB has the biggest ranches in Uganda. This equipment is needed to establish and maintain the pasture grounds. Due to this inadequacy, the institution is facing a challenge of farms/ ranches being encroached on by bush and its associated effect.

9) Kuroiler Chicken. There is a high demand for Kuroiler chicken in Uganda, despite the efforts to expand and increase production capacity of Kuroiler up to 1,000,000 Chicks. There is need to expand the hatching facilities at NAGRC&DB and to build and facilitate 13 mother Units all over the country to increase on the supply of the day-old chicks. There is also a need for selection of 4,000 indigenous chickens of different characteristics from different regions of the country to develop a Ugandan Kuroiler like breed through selection and improvement.

Table V3.2: Key Changes in Vote Resource Allocation

Changes in Budget Allocations and Outputs from 2013/14 Planned Levels:			Justification for proposed Changes in Expenditure and Outputs
2014/15	2015/16	2016/17	
<i>Vote Function: 0109 Breeding and Genetic Development</i>			
Output: 0156 09 Multiplication of pure Dairy breeds & appropriate crosses			
<i>US\$ Bn:</i> -0.310	<i>US\$ Bn:</i> -0.200	<i>US\$ Bn:</i> -0.200	<i>The National Animal Genetic Resources Centre and Data Bank's vision statement is to: - Optimize livestock production and productivity through animal breeding to improve food security and eradicate poverty in Uganda. The NAGRC&DB programs' activities are compliant with government of Uganda NDP and DSIP. Among the many mandated and funded Outputs of the institution include; increased farmers access to quality and quantity Livestock genetics, increased farmers access to affordable and quality livestock breeding services, etc. With increased funding allocation to support execution of the mandated activities, performance on the institution's outputs will increase and therefore contribute significantly to addressing of key sector performance issues and prosperity of the Ugandan farmers.</i>
Performance of NAGRC&DB has for over ten years been affected by inadequate funding of its mandated activities. With the increased funding, there is no doubt the performance (quantity and quality) of its services is expected to have a 15% annual increase.	Performance of NAGRC&DB has for over ten years been affected by inadequate funding of its mandated activities. With the increased funding, there is no doubt the performance (quantity and quality) of its services is expected to have a 15% annual increase.	Performance of NAGRC&DB has for over ten years been affected by inadequate funding of its mandated activities. With the increased funding, there is no doubt the performance (quantity and quality) of its services is expected to have a 15% annual increase.	
Output: 0156 21 Breeding & multiplication of meat goats			
<i>US\$ Bn:</i> -0.068	<i>US\$ Bn:</i> -0.070	<i>US\$ Bn:</i> 0.030	
Output: 0156 27 Evaluation and multiplication of improved pasture and fodder germ-plasm			

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	Changes in Budget Allocations and Outputs from 2013/14 Planned Levels:			Justification for proposed Changes in Expenditure and Outputs
	2014/15	2015/16	2016/17	
US\$ Bn:	-0.219	0.073	0.073	

V4: Vote Challenges for 2014/15 and the Medium Term

This section sets out the major challenges the vote faces in 2014/15 and the medium term which the vote has been unable to address in its spending plans.

The vote is faces following challenges of:

1) High level of siltation of the valley tanks, Due to high levels of siltation, animals get stuck and die as they can't be rescued and it is dangerous to human life. These silted valley dams are the major sources of water to the farms and ranches, Lack of adequate amounts of water would lead to death of animals. This challenge needs to be addressed immediately. NAGRC&DB has a very limited budget and desilting can take a quarter of NAGRC&DB's annual budget (i.e. evaluation has been done by MAAIF engineers and desilting of the dams requires about UGX 1,000,000,000).

2) Rehabilitation of the farms. There is a big challenge of the need to rehabilitate the infrastructure of government farms/ ranches under NAGRC&DB. The existing infrastructure is more than thirty (30) years old and therefore requires extra funding to improve on them to the tune of UGX 15,000,000,000. This infrastructure includes: fences, farm roads, fire breaks, residential farm managers and workers houses, water and watering facilities and animal dips. There is also need to establish woodlots on all NAGRC&DB farms.

3) Restocking of the NAGRC&DB farms and ranches. His Excellence the President of Uganda gave a directive in 2011 to restock Aswa ranch with 5000 animals (UGX 25,000,000,000) and Rubona Stock farm which were affected by war. The proposals were submitted by NAGRC&DB to relevant authorities; currently we are still waiting for the positive response.

NB. The supplementary of UGX 2,000,000,000 in F/Y 2013/2014. NAGRC&DB, has requested the above mentioned supplementary for mainly the purpose of rehabilitation and restocking of Aswa and Ruhengyere ranches with 1,000 breeding animals. The purpose of this intervention is aimed at contributing to the Governments drive to avail quality dairy producing animals to resource poor farmers especially in areas where cattle kept or where farmers lost animals due to the different times the country went through. Once the above mentioned supplementary is granted, NAGRC&DB would like to request that this funding is maintained in the coming financial years. This request is to make sure that the programme once embarked on is sustained as the animals procured would require this funding for proper management (including production and multiplication), in order to avail quality stock to the targeted farmers in the country.

4) Land encroachment, since most of the land is not fenced; the institution is encountering encroachment and the related implications.

5) Transport. Currently NAGRC&DB is facing a big challenge of transport since all its vehicles are beyond five years and are over 250, 0000 KM. Ministry of Works and Transport requires boarding off these vehicles. The institution has a very limited budget with no capital development budget and routine monitoring and evaluation (ME) of farms which are so distant from head office. ME needs to be undertaken regularly and consistently through the year. Funds required (UGX 800,000,000).

6) Fully operationalize the institution organo structure which was approved in 2005 and recommended its funding by Ministry of Finance. Since that time the structure has never been fully funded to recruit and retain the required human resource despite a UGX 1,000,000,000 increase on NAGRC&DB wage bill this left a shortfall of UGX 479,848,000. Lack of adequately funding scientists has led to the organization losing two (2) senior staff with PhD in the last four years. These staff had been previously trained under the organization.

7) Frequent breakdown of the Liquid Nitrogen Plant due to the lack adequate funds for repairs and maintenance, has put some breeding activities at a standstill in some districts and a reduction in others.

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This is because, liquid Nitrogen plays a pivotal role in preservation of semen, and in turn this has led to a decline in numbers of Artificial Inseminations (AI) carried out. The amount of funds required for a regular servicing contract is about UGX 250,000,000.

8) Mechanization. There are inadequate tractors and associated implements for the organization yet NAGRC&DB has the biggest ranches in Uganda. This equipment is needed to establish and maintain the pasture grounds. Due to this inadequacy, the institution is facing a challenge of farms/ ranches being encroached on by bush and its associated effect. Funds required (UGX 650,000,000).

9) Kuroiler Chicken. There is a high demand for Kuroiler chicken in Uganda, despite the efforts to expand and increase production capacity of Kuroiler up to 1,000,000 Chicks. There is need to expand the hatching facilities at NAGRC&DB and to build and facilitate 13 mother Units all over the country to increase on the supply of the day-old chicks. There is also a need for selection of 4,000 indigenous chickens of different characteristics from different regions of the country to develop a Ugandan Kuroiler like breed through selection and improvement. Funds required (UGX 2,000,000,000).

Table V4.1: Additional Output Funding Requests

Additional Requirements for Funding and Outputs in 2014/15:	Justification of Requirement for Additional Outputs and Funding
<i>Vote Function: 0101 Breeding and Genetic Development</i>	
Output: 0156 01 Human Resource management & development.	
<p><i>UShs Bn: 23.789</i></p> <p>- Although salaries of the institution's staff were increased by about 40% through the 2013/14 wage funding, salaries of staff still need to be matched with those of the approved organostructure to enable optimal staff performance and also minimize on staff turn over rate.</p> <p>- Additional wage funding would also enable recruitment and filling of vacant key positions affecting performance. An annual increase in funding of staff salaries to a tune of at least 25% should be considered to enable gradual increase in staff salaries and recruitment of more staff.</p>	<p><i>For the last ten (10) years NAGRC&DB staff has been getting inadequate salaries which has for long demotivated staff leading to under performance and at times loss of quality staff as they seek for better paying jobs. Increasing staff wage to a satisfactory level is a very important motivating tool that would impact tremendously on their performance (performance to improve at least 75%) and performance of the sector.</i></p>
Output: 0156 09 Multiplication of pure Dairy breeds & appropriate crosses	
<p><i>UShs Bn: 2.000</i></p> <p>- Increased production of quality and affordable female dairy crossbred calves, 1,000 calves to be produced.</p> <p>- Increased production of affordable female pure bred calves, 500 calves to be produced.</p>	<p><i>NAGRC&DB is operating five (5) dairy farms where each farm is mandated to successfully implement a particular breeding program that must contribute to availability of enough quality and affordable dairy genetics to the farming communities in the respective regions where they are situated (At least one dairy heifer d to each family in the region). Optimal Performance of these dairy farms is still affected by majorly: - lack of Water points, silting of valley tanks and dams, poor condition of farm buildings, roads, fences. Lack of land titles/encroachment on some of the farms, lack or inadequate farm machinery, poor pasture fields, etc.</i></p> <p><i>For optimal breeding, production, reproduction and multiplication of livestock genetics in the required quantities and quality for the farmers in Uganda, there is need for additional funding to facilitate; restocking of each farm with two hundred (200) pedigree heifers, purchase of five (5) new motor vehicles, all the existing vehicles are above 250,000 Kilometers and are above five years old so the law requires boarding them off yet the institution requires vehicles to facilitate timely execution and monitoring of various activities on these dairy farms. Purchase of three (3) Tractors with implements, there is a need to provide each farm with a tractor and associated implements which will facilitate production of animal feeds, maintenance of paddocks and pasture grounds on farms in order to produce optimally and</i></p>

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Additional Requirements for Funding and Outputs in 2014/15:	Justification of Requirement for Additional Outputs and Funding
	<i>contribute to sector performance.</i>
<p>Output: 0156 14 Multiplication of pure beef breeds & appropriate crosses <i>US\$ Bn: 1.000</i> - Increased production of quality and affordable female beef crossbred calves, 1,500 calves to be produced. - Increased production of affordable beef pure bred calves, 500 calves to be produced.</p>	<p><i>NAGRC&DB is operating five (5) beef ranches where each of the ranches is mandated to successfully implement a particular breeding program (for both pure and crossbred genetics) that must contribute to availability of enough quality and affordable beef genetics to the farming communities in the respective regions where they are situated. Optimal Performance of these ranches is still affected by majorly: - lack of Water points, silting of valley tanks and dams, poor condition of farm buildings, roads, fences. Lack of land titles/encroachment on some of the farms, lack or inadequate farm machinery, poor pasture fields, etc. For optimal breeding, production, reproduction and multiplication of livestock genetics in the required quantities and quality for the farmers in Uganda, there is need for additional funding to facilitate; restocking of the ranches with at least five hundred (500) female heifers, purchase five (5) new motor vehicles, all the existing vehicles are above 250,000 Kilometers and are above five years old so the law requires boarding them off yet the institution requires vehicles to facilitate timely execution and monitoring of various activities on these ranches. Purchase of five (5) Tractors with implements, there is a need to provide each ranch with a tractor and associated implements which will facilitate production of animal feeds, maintenance of paddocks and pasture grounds on the ranches in order to produce optimally and contribute to sector performance and development.</i></p>
<p>Output: 0156 27 Evaluation and multiplication of improved pasture and fodder germ-plasm <i>US\$ Bn: 0.800</i> - Establishment of fifty (50) commercial fodder banks (5 on each farm/ranch) for pastures and legumes production and multiplication on all NAGRC&DB farms. - Establishment of perimeter walls around each of the fodder banks. - Establishment of a nutritional laboratory. - With additional funding, the annual industrial quality and quantity production of animal feeds under NAGRC&DB is expected to increase by 20%.</p>	<p><i>For the institution to optimally breed, produce and multiply improved livestock genetics for availing to the farmers in Uganda and for the small holder farmers to benefit from their dairy enterprises, the cost of producing these genetics must be under control. In livestock production, feeding takes 60% of the total production costs, it's prudent that NAGRC&DB's efforts for commercial production of feeds is financially supported the fact that NAGRC's the only government institution with vast land (300 square miles), 50% of which is still underutilized. This land can be put to its best use if it's used to establish fodder multiplication fields for obtaining raw materials to be used in affordable, quality and quantity production of processed feeds for sell to farmers and for feeding the institution's herds.</i></p>
<p>Output: 0156 34 Production and sale of founder brood stock of fisheries resources. <i>US\$ Bn: 0.500</i> - Increased production of quality and affordable fish fingerings, 100 tons per year.</p>	<p><i>- One of the National Animal Genetic Resources Center and Data Bank (NAGRC&DB) mandate is to breed and produce economically viable fish genetics for commercial fish farmers in Uganda. Despite there being water bodies on the different NAGRC&DB farms and ranches, the institution till today has not engaged in any activity of fish breeding. This is all attributed to lack of funds to develop the necessary infrastructure.</i></p> <p><i>- For optimal fish fingerings breeding and production that would contribute to development of the fish subsector therefore, there is need to allocate funds to the NAGRC&DB fish genetics development department. Funding will facilitate; Establishment of ten (10) breeding ponds, recruitment of fish geneticists, install the required equipment and also purchase specialized vehicles.</i></p>

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This section discusses how the vote's plans will address and respond to the cross-cutting policy, issues of gender and equity: HIV/AIDS; and the Environment, and other budgetary issues such as Arrears and NTR..

(i) Cross-cutting Policy Issues

(i) Gender and Equity

No outputs, activities, and budget allocations have been planned for to address gender and equity issues in financial year 2013/2014

(ii) HIV/AIDS

No outputs, activities, and budget allocations have been planned for to address HIV/AIDS responsibilities in financial year 2013/2014.

(iii) Environment

No outputs, activities, and budget allocations have been planned for to address the environmental responsibilities in financial year 2013/2014.

(ii) Payment Arrears

The table below shows all the payment arrears outstanding for the Vote:

Payee	Payment Due Date	Amount (US\$ Bn)
Ultimate security	05/12/2013	0.01
Staff Salary arrears	31/05/2013	0.02
Security plus	30/06/2013	0.01
Observer media	30/06/2013	0.00
NSSF	30/06/2013	0.29
New vision	31/08/2013	0.00
Monitor Publications	30/06/2013	0.00
Milly's restaurant	30/06/2013	0.11
lake Albert kuku feeds	30/06/2013	0.00
Energy electrical repairs	28/06/2013	0.00
Bwatda Enterprises	05/12/2013	0.01
Arrow center	31/05/2013	0.01
	Total:	0.471

The fact that the health and condition of animals that are managed on the different NAGRC&DB farms must be maintained at its best for optimal performance, this means that despite the limited funding received from the central government for a period of time, the institution on a daily basis had to meet both health and nutritional demands of the animals under its custody thus obtaining drugs, feeds and services on credit. The institution's existing arrears therefore are as a result of procuring drugs and feeds for the animals, paying of staff salaries and other support/related services.

After attaining vote status, funding of the institution was increased. With increased funding under agriculture supplies and salaries therefore, the institution is not expected to incur any new arrears.

(ii) Non Tax Revenue Collections

The table below shows Non-Tax Revenues that will be collected under the Vote:

Source of NTR	US\$ Bn	2012/13 Actual	2013/14 Budget	2013/14 Actual by Sept	2014/15 Projected
Animal & Crop Husbandry related Levies				0.000	0.600
	Total:			0.000	0.600

According to the Animal Breeding Act 2001, the National Animal Genetic Resources Centre and Data Bank is

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supposed to obtain funding for its operations from the sources below:-

- Funds appropriated to the Centre by the Parliament of Uganda
- Loans from Government, or from any person or organization within or outside Uganda
- Grants, Gifts and donations that may be received from any person or organizations from source within or outside Uganda
- Profit from the commercial activities of the Centre.

(NAGRC&DB) through its commercial operations has the capacity to collect Non Taxable Revenue each financial year to aid it in its operations. For FY 2013/2014, the institution projected to generate about six hundred million Ugandan shillings (600,000,000/=) from the sale of animals, ground rent, provision of services, etc. In the subsequent financial year s, the institution projects to generate NTR as follows; FY 2014/2015 UGX 800,000,000, FY 2015/2016 UGX 1,000,000,000, and FY 2016/2017 UGX 1,200,000,000.

It's important to note that, NAGRC &DB currently has no capital development fund yet there are a number of infrastructural developments that have to be put in place on different farms. There are a number of emergency animal treatments that require a lot of money yet their funding from non-wage allocations is still small, the board of directors has to sit and also tour farms but their facilitation is not fully funded. The institution is also currently facing a problem of fencing land and land encroachment all of which need money. The same generated NTR needs to be ploughed back into the institution's commercial activities to enable generation of more revenue in order to break even. From the above explanation therefore, a number of activities that missed allocation of funds due to limited funding are facilitated from the generated NTR.