

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

	FY2015/16 Outturn	FY2016/17		MTEF Budget Projections				
		Approved Budget	Spent by End Q1	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Recurrent Wage	1.900	1.900	0.437	1.900	1.995	2.095	2.199	2.309
Non Wage	1.993	2.240	0.473	1.813	1.994	2.193	2.522	2.900
Devt. GoU	0.000	8.000	0.183	7.500	8.625	10.350	12.420	24.840
Ext. Fin.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GoU Total	3.893	12.140	1.094	11.213	12.614	14.638	17.142	30.050
Total GoU+Ext Fin (MTEF)	3.893	12.140	1.094	11.213	12.614	14.638	17.142	30.050
<i>A.I.A Total</i>	0.520	1.000	0.135	3.420	3.420	3.500	3.500	3.600
Grand Total	4.413	13.140	1.228	14.633	16.034	18.138	20.642	33.650

(ii) Vote Mission Statement

Optimize livestock production and productivity through animal breeding to improve food security and eradicate poverty in Uganda.

Table V1.2: Sector Outcomes and Key Output Indicators

Programme :	56 Breeding and Genetic Development			
Programme Outcome:	Increased availability and access to improved genetics.			
Objective :	Production, Reproduction and Improved access to improved animal genetics.			
Responsible Officer:	EXECUTIVE DIRECTOR			
Programme Performance Indicators (Output)	2016/17 Target	2017/18 Target	2018/19 Target	2019/20 Target
<i>Sector Outcome : Increased production and productivity of priority and strategic commodities</i>				
• Number of breeding goats supplied.		2000	2000	2000
• Number of meat goat kids' produced.		2000	2000	3000
• Number of breeding pigs supplied.		5000	1000	1000
• Number of piglets produced.		500	1000	1000
• Number of cattle embryos procured		0	0	0
• Number of semen straws production and distributed.		24270	24270	24270

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

• Doses of semen produced and sold to farmers	80,000	76200	76200	76200
• Litres of liquid nitrogen produced	80,000 LTRS	120000	120000	120000
• No. of AI Satellite centres established	4	4	4	4
• Number of farmers sensitized in assisted reproductive techniques (AI, ET, NPD)	2,600	3000	3000	3000
• Number of technicians trained in assisted reproductive techniques (AI, ET, NPD)	200	200	200	400
• Quantity of improved breeds produced (cattle, goats, pigs, chicken)	843,250	844801	844801	844801
• Number of liters of liquid nitrogen produced, distributed & sold	Aminimum of eighty thousand (80,000,000)litres of liquid nitrogen	120000	120000	120000
• Number of acres for pasture and forder germ-plasm established.	1,440	3000	300	300
• Number of tones for pasture and forder germ-plasm produced.	140,400	300	300	300

V2: Past Vote Performance and Medium Term Plans

Performance for Previous Year FY 2015/16

Production of calves from pure dairy herds stood at 146 against planned 150.

Production of cross bred calves born from dairy and beef cattle stood 975 against 1,300.

Production of calves from the elite local herd stood at -770 against the planned 600.

Production of a minimum of Kuroiler chicks stood at -221,866 against the planned 840,000.

Production of goat kids stood at -805

Production of piglets stood at -211 against planned 200.

Production of semen respectively stood at -76,200 against planned 76,200

Production of corn v -35 tones

Production bales of hay stood at -4,690 bales against planned 6,000.

Production of quality animal feeds-360 tones

Training of artificial technicians stood at -56 against planned 50.

Production of liters liquid nitrogen stood at -19,287.5 against the planned 43,200 litres.

Performance as of BFP FY 2016/17 (Performance as of BFP)

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

The total number of Kuroiler chicks produced during the quarter stood at forty six thousand eight hundred ninety one (46,891) which were sold to individual farmers from 27 districts.

A total of One hundred eighty seven (187) calves were born during the period under review.

A total of Nineteen (19) pure dairy calves were born while 11 were crosses. While that for pure bred dairy calves were 38.

The number of beef calves produced during the quarter stood at one hundred fifty seven (157). 106 calves were pure bred while the rest are crosses.

The targets for the quarter are 150 crossbred and 100 purebred calves, respectively

The total number of liters of Liquid Nitrogen stood at (5719) Nitrogen (LN) was produced during the quarter. This represents 53% of the target for the quarter.

The total dozes of Semen Produced stood at two thousand six hundred fifteen (2,615), representing about 13.7 % of the target for the year.

The total number of bales of hay produced stood at (2815) bales was in the quarter.

The total number of camb rough piglets produced stood at sixty four (64).

The total number of kids produced in the quarter stood at seventy five (75) kids.

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

Table V2.1 Past and FY 2017/18 Key Outputs

FY2016-2017		FY 2017-2018	
Appr. Budget and Planned Outputs	Expenditures and Achievements by end Q1	Proposed Budget and Planned Outputs	
Vote: 125 National Animal Genetic Res. Centre and Data Bank			
<i>Program :56 Breeding and Genetic Development</i>			
Output : 09 Multiplication of pure Dairy animals & appropriate crosses			
Development, multiplication and utilization of livestock genetic resources for example Multiplication of various cattle breeds (Dairy and beef), breeding and multiplication Pig germplasm, breeding and multiplication of goats, Breeding and multiplication o	Two hundred and fifty (250) dairy animals were	Three hundred one (301) dairy calves shall be produced on NAGRC&DB farms and ranches.	
<i>Total Output Cost(Ushs Bn):</i>	<i>0.218</i>	<i>0.048</i>	<i>0.100</i>
Output : 10 Industrial production of milk and allied products			
<i>Total Output Cost(Ushs Bn):</i>	<i>0.009</i>	<i>0.009</i>	<i>0.000</i>
Output : 13 Beef breeding, promotion of beef breeds associations and beef breeder societies.			
	Two beef breeder workshops were organized and attended.		
<i>Total Output Cost(Ushs Bn):</i>	<i>0.013</i>	<i>0.003</i>	<i>0.000</i>
Output : 14 Multiplication of pure beef breeds & appropriate crosses			
	The number of beef calves produced during the quarter stood at one hundred fifty seven (157). 106 calves were pure bred while the rest are crosses.	Two thousand (2000) calves shall be produced on NAGRC&DB farms and ranches.	
<i>Total Output Cost(Ushs Bn):</i>	<i>0.224</i>	<i>0.033</i>	<i>0.100</i>
Output : 21 Breeding & multiplication of meat goats			
	The total number of kids produced in the quarter stood at seventy five (75) kids	Two thousand (2000) kids shall be produced during the year.	
<i>Total Output Cost(Ushs Bn):</i>	<i>0.030</i>	<i>0.008</i>	<i>0.040</i>
Output : 23 Breeding & multiplication of pigs			
		A total of Five hundred (500) quality genetic piglets shall be produced during the year.	
<i>Total Output Cost(Ushs Bn):</i>	<i>0.100</i>	<i>0.046</i>	<i>0.090</i>
Output : 27 Evaluation and multiplication of improved pasture and fodder germ-plasm			
		Three hundred (300) acres of improved pasture shall be established.	

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

Total Output Cost(Ushs Bn):	0.250	0.056	0.300
Output : 29 Develop and maintain collaborative linkages for the establishment and development of a National Animal identification system			
			Five collaborative linkages shall be established.
Total Output Cost(Ushs Bn):	0.010	0.003	0.005
Output : 30 Development and maintenace of a National Livestock Registry and National Data Bank			
			A well maintained livestock registry shall be established.
Total Output Cost(Ushs Bn):	0.014	0.003	0.030
Output : 35 Training of fish farmers and breeders			
Total Output Cost(Ushs Bn):	0.005	0.000	0.000
Output : 37 Training, refreshing and facilitating AI and MOET technicians			
			A total of Five hundred (500) quality genetic piglets shall be produced during the year.
Total Output Cost(Ushs Bn):	0.060	0.015	0.040
Output : 39 Production, procurement and sale of semen, eggs, ova, embryos and their associated equipment			
	The total dozes of Semen Produced stood at two thousand six hundred fifteen (2,615)		Seventy six thousand two hundred (76,200) dozes/straws of semen shall be produced.
Total Output Cost(Ushs Bn):	0.160	0.036	0.100
Output : 40 Production, procurement and sale of liquid nitrogen and associated equipment.			
	The total number of liters of Liquid Nitrogen stood at (5719) Nitrogen (LN) was produced during the quarter		One hundred twenty thousand (120,000) liters of liquid Nitrogen shall be produced.
Total Output Cost(Ushs Bn):	0.060	0.010	0.100
Total Program Cost (Ushs Bn):	1.153	0.268	0.905
Total Vote Cost (Ushs Bn):	1.153	0.268	0.905

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

FY 2017/18 Planned Outputs

BEEF CATTLE: Two thousand calves shall be produced on NAGRC&DB farms and ranches.

DAIRY CATTLE: Three hundred one (301) dairy calves shall be produced.

GOATS: Two thousand kids shall be produced during the year

KUROILER: Eight hundred forty thousand (840,000) Kuroiler birds shall be produced.

PIGGERY: A total of 500 quality genetic piglets shall be produced during the year.

ARTIFICIAL INSEMINATIONS TRAINING. Fifty (50) Ai technicians shall be trained.

SEMEN PRODUCTION: Seventy six thousand two hundred thousand (76,200) dozes/straws of semen shall be produced.

Liquid Nitrogen: One hundred twenty thousand (120,000) liters of liquid Nitrogen shall be produced.

Medium Term Plans

Improve the minimum infrastructure requirements on farms and ranches.

Improve pasture and Nutrition on the farms and ranches in order for animals to maximize their production potential.

Rehabilitation and restocking of the national bull stud ant Entebbe for efficient semen production.

Restocking of farms and ranches through use of the available resources.

Request for additional funding or supplementary budgets

Purchase of an automated semen packing and freezing machine to improve efficiency in semen production and processing.

Purchase of tractors and implements at least one unit per year for three years.

Efficiency of Vote Budget Allocations

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

Ninety percent of the resources (non wage recurrent) in the recurrent budget were efficiently allocated to inputs contributing to the production of livestock that is Medical and Agricultural supplies and Agricultural supplies.

In matters of efficiency, the allocation of resources, utilities such as electricity, water were given a first call.

Table V2.2 Allocations to Key Sector and Service Delivery Outputs Over the Medium Term

<i>Billion Uganda Shillings</i>	(i) Allocation				(ii) % Vote Budget			
	2016/17	2017/18	2018/19	2019/20	2016/17	2017/18	2018/19	2019/20
Key Sector	1.153	0.905	0.859	0.945	100.0%	100.0%	100.0%	100.0%
Service Delivery	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0%

Table V2.3 Key Unit Costs of Services Provided and Services Funded (Shs '000)

N / A

Vote Investment Plans

- 1) Purchase of 1000 heads of cattle.
- 2) Rehabilitation of the National bull stud.
- 3) Finalization of AI hostel.
- 4) Purchase of one tractor and Implements.
- 5) Purchase of motor vehicles and service delivery vans.
- 6) Construction of fences on farms and ranches.
- 7) Purchase bush clearing equipment.
- 8) Construction of administrative structure at Maruzi/Lusenke ranch.

Water reticulation on NAGRC&DB ranches.

V2.4 Allocations by Class of Output Over the Medium Term

(i) Allocation	(i) % Vote Budget
-----------------------	--------------------------

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

Billion Uganda Shillings	2016/17	2017/18	2018/19	2019/20	2016/17	2017/18	2018/19	2019/20
Consumption Expenditure (Outputs Provided)	4.140	4.140	4.359	4.845	34.1%	34.1%	31.9%	30.6%
Grants and Subsidies (Outputs Funded)	0.000	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0%
Investment (Capital Purchases)	8.000	8.000	9.300	11.000	65.9%	65.9%	68.1%	69.4%
Total	12.140	12.140	13.659	15.845				

Table V2.5: Major Capital Investment (Capital Purchases outputs over 0.5Billion)

FY 2016/17		FY 2017/18	
Appr. Budget and Planned Outputs	Expenditures and Achievements by end Q1	Proposed Budget and Planned Outputs	
Vote 125 National Animal Genetic Res. Centre and Data Bank			
Programme : 56 Breeding and Genetic Development			
Development Project : 1325 NAGRC Strategic Intervention for Animal Genetics Improvement Project			
Output: 72 Government Buildings and Administrative Infrastructure			
1) Four crushes with collecting bomas constructed at Ruhengyere,Aswa,maruzi and Nshara.	Bill of quantities and drawings for Four (4) goats houses at Ruhengyere,Rubona,Nshaara &Sanga. 2) Four(4) spray races Established at Lusenke,maruzi and Rubona stock farm. 3) Three water structures improved on farms and ranches are ready for tendering.	Improved administrative infrastructure on farms and ranches.	
2) One AI Hostel established at Ruhengyere Construction of			
3) One Pig sty established			
4) Four(4) spray races Established at Lusenke,maruzi and Rubona stock farm.			
Total Output Cost(Ushs Thousand):	1.831	0.017	1.000
Gou Dev't:	1.831	0.017	1.000
Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000
Output: 73 Roads, Streets and Highways			
1) 40 KM of farm access roads and fire brakes opened at Maruzi,Ruhengyere,and Nshaara	Work is on going for construction of 40 Km farm rod net work and fire brakes opened.	Increased access to farms,ranches and controlled bush fires.	
Total Output Cost(Ushs Thousand):	0.200	0.000	1.500
Gou Dev't:	0.200	0.000	1.500
Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000

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

Output: 77 Purchase of Specialised Machinery & Equipment

1) One Semen packing and freezing machine acquired for Entebbe bull stud.	The bidding is ongoing for One Semen packing and freezing machine.	Improved mechanization of farms and ranches.	
2) Fifteen Pressurised cyclinders for LN2 storage (200 litres) at AI subcentres acquired for fifteen Ai sub-centers.			
3) Fifteen sets (3, 10, 35 litres) AI Kits acquired.			
4)			
Total Output Cost(Ushs Thousand):	2.229	0.008	1.700
Gou Dev't:	2.229	0.008	1.700
Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000

Output: 79 Acquisition of Other Capital Assets

1) Three hundred acres of pasture established for seed production for farmers to access.	The procurement processes are in their final stages.	Improved stocks on farms and ranches leading to improved Production.	
2) Fifteen Tropicalised exotic bulls procured and imported.			
3) Sixty exotic pigs procured and imported.			
4) Eighty five exotic goats procured and imported.			
5) Twe			
Total Output Cost(Ushs Thousand):	2.430	0.158	2.800
Gou Dev't:	2.430	0.158	2.800
Ext Fin:	0.000	0.000	0.000
A.I.A:	0.000	0.000	0.000

V3: Proposed Budget Allocations for 2017/18 and the Medium Term Projections

Table V3.1: Past Expenditure Outturns and Medium Term Projections by Programme*

Billion Uganda shillings	FY 2015/16 Outturn	FY 2016/17		Medium Term Projections				
		Approved Budget	Actual Releases by End Q1	2017-18	2018-19	2019-20	2020-21	2021-22
Vote :125 National Animal Genetic Res. Centre and Data Bank								
Programme: 56 Breeding and Genetic Development	3.893	12.140	1.094	11.213	12.614	14.638	17.142	30.050
Total for the Vote	3.893	12.140	1.094	11.213	12.614	14.638	17.142	30.050

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

Major Expenditure Allocations in the Vote for FY 2017/18

xxx

Table V3.2: Key Changes in Vote Resource Allocation

Major changes in resource allocation over and above the previous financial year	Justification for proposed Changes in Expenditure and Outputs
<i>Vote :125 National Animal Genetic Res. Centre and Data Bank</i>	
<i>Programme : 56 National Animal Genetic Res. Centre and Data Bank</i>	
Output: 02 Financial management,management accounting & financial Accounting.	
Change in Allocation (US\$ Bn) : 0.080	Increased administrative activities led to increased allocation of funds.
Output: 03 Promotion and development of regional & international relations.	
Change in Allocation (US\$ Bn) : (0.008)	This was not a highly priority area leading to such reduction in the allocation.
Output: 04 Establishment & maintenance of inter agency and public private partnership (PPP) linkages	
Change in Allocation (US\$ Bn) : 0.030	There is an increased need for Public Private partnership to increase efficiency.
Output: 05 Monitoring and evaluation	
Change in Allocation (US\$ Bn) : 0.020	There is increased need to monitor and evaluate various activities.
Output: 06 Maintenance & development of NAGRC&DB as the focal point of the global plan of action for management of Animal genetic resources.	
Change in Allocation (US\$ Bn) : (0.022)	This is one of the unfunded priorities due to inadequate funds.
Output: 09 Multiplication of pure Dairy animals & appropriate crosses	
Change in Allocation (US\$ Bn) : (0.118)	The biggest number of activities have been handled under the development budget.
Output: 10 Industrial production of milk and allied products	
Change in Allocation (US\$ Bn) : (0.009)	Currently this section is not functional which led to non allocation of funds.
Output: 11 Conservation and utilization of indogenous Animal Genetic resources.	
Change in Allocation (US\$ Bn) : 0.026	There is a need to conserve the indigenous animal genetic resources in order to be compliant with the millennium redevelopment goals.
Output: 12 Promotion of beef cattle breeding	
Change in Allocation (US\$ Bn) : 0.052	There is a high demand for breeding beef animals for promotion to feed the growing abattoirs in the country for export promotion.
Output: 13 Beef breeding, promotion of beef breeds associations and beef breeder societies.	
Change in Allocation (US\$ Bn) : (0.013)	The activities have been catered for under the project leading to reallocation of funds to other priority areas under the recurrent budget.
Output: 14 Multiplication of pure beef breeds & appropriate crosses	

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

Change in Allocation (US\$ Bn) :	(0.124)	There were more funds to handle some of the activities under development,.
Output: 16 Conservation and utilization of indigenous Animal Genetic resources.		
Change in Allocation (US\$ Bn) :	(0.015)	Some activities have been catered for under development budget.
Output: 18 Select,improve and conserve indigenous poultry genetic resources.		
Change in Allocation (US\$ Bn) :	(0.050)	There are inadequate funds to facilitate the exercise.
Output: 19 Production and distribution of chicks		
Change in Allocation (US\$ Bn) :	0.050	There is a higher demand for kuroiler chicks all over the country.
Output: 21 Breeding & multiplication of meat goats		
Change in Allocation (US\$ Bn) :	0.010	There is a higher demand for improved goats.
Output: 27 Evaluation and multiplication of improved pasture and fodder germ-plasm		
Change in Allocation (US\$ Bn) :	0.050	Feeds take 90% of the animals daily requirements.
Output: 28 Industrial production of animal feeds.		
Change in Allocation (US\$ Bn) :	(0.050)	There is a higher demand for feeds.
Output: 29 Develop and maintain collaborative linkages for the establishment and development of a National Animal identification system		
Change in Allocation (US\$ Bn) :	(0.005)	There are other priority areas.
Output: 30 Development and maintenance of a National Livestock Registry and National Data Bank		
Change in Allocation (US\$ Bn) :	0.016	There is a higher demand to operationalise the data bank.
Output: 31 Develop National herd/milk/beef recording schemes		
Change in Allocation (US\$ Bn) :	(0.005)	The establishment of Automated systems.
Output: 32 Performance & progeny-testing schemes		
Change in Allocation (US\$ Bn) :	(0.006)	The existence of new other schemes.
Output: 34 Production and sale of founder brood stock of fisheries resources.		
Change in Allocation (US\$ Bn) :	0.005	There is increased demand for fish fingerings.
Output: 35 Training of fish farmers and breeders		
Change in Allocation (US\$ Bn) :	(0.005)	There is increased funding through AIA which bridges the gap allocated to other areas.
Output: 36 Strengthening and maintenance of dairy & beef bull, billy & boar studs.		
Change in Allocation (US\$ Bn) :	0.060	There is increased need to care for the restocked stud.
Output: 37 Training, refreshing and facilitating AI and MOET technicians		
Change in Allocation (US\$ Bn) :	(0.020)	There are partnerships developed in relation to the training.
Output: 38 Providing breeding-training to farmers and other stakeholders along the ARTs value chain		
Change in Allocation (US\$ Bn) :	0.010	There is increased demand for ARTs training.
Output: 39 Production, procurement and sale of semen, eggs, ova, embryos and their associated equipment		

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

Change in Allocation (US\$ Bn) : (0.060)	In the past year of operation there was enough stock to take care of the current demand
Output: 40 Production, procurement and sale of liquid nitrogen and associated equipment.	
Change in Allocation (US\$ Bn) : 0.040	The demand for animal reproductive inputs is high leading to an increase in the allocation.
Output: 41 Strengthening and maintenance of state-of-the-art ARTs laboratories	
Change in Allocation (US\$ Bn) : (0.030)	Au-IBER promised to maintain and furnish the laboratory.
Output: 72 Government Buildings and Administrative Infrastructure	
Change in Allocation (US\$ Bn) : (0.831)	The biggest portion of infrastructure development was handled in the first year of operation.
Output: 73 Roads, Streets and Highways	
Change in Allocation (US\$ Bn) : 1.300	Improved access and control of fire in the farms and ranches.
Output: 75 Purchase of Motor Vehicles and Other Transport Equipment	
Change in Allocation (US\$ Bn) : (0.310)	The biggest batch was procured in the first year of operation leading to the reduced allocation.
Output: 77 Purchase of Specialised Machinery & Equipment	
Change in Allocation (US\$ Bn) : (0.529)	There was reduced purchase of machinery and equipment as more equipment was bought in the first year of operation.
Output: 79 Acquisition of Other Capital Assets	
Change in Allocation (US\$ Bn) : 0.370	There is increased demand for restocking of farms and ranches.

V4: Vote Challenges for 2017/18 and the Medium Term

Vote Challenges for FY 2017/18

Land encroachment most of the farm land is encroached on and litigation is difficult since the powers to sue are vested in chairman Uganda land commission so this make NAGRC&DB unable to manage encroachers appropriately.

Inadequate capital investments to transform the dilapidated farms into modern breeding centres.

Low staff salaries and wages since 2001 to 2015 NAGRC&DB approved organ structure had never been fully funded which made salaries and wages to below compared to other sister organizations

Under stocking, most of the farms are under stocked due to inadequate capital to purchase stock and put in place the required minimum infrastructure.

Poor infrastructure on farms (fencing, roads, water, bushes, and poor pastures) this makes it difficult for female worker to operate from those farms and ranches.

Inadequate mechanization to ease farm operations.

Poor Security on farms this is mainly due to lack of reliable perimeter fences.

Tick resistance which has increased the cases of tick born diseases

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

Table V4.1: Additional Output Funding Requests

Additional requirements for funding and outputs in 2017/18	Justification of requirement for additional outputs and funding
Vote 125 -- National Animal Genetic Res. Centre and Data Bank	
Programme : 56 -- Breeding and Genetic Development	
Output : 01 Human Resource management & development.	
Funding requirement US\$ Bn : 3.774	The additional funding will improve the morale of the scientists contributing to the goal of improving production and productivity of the vote and the entire sector at large.
Output : 08 Dairy breeding, promotion of Dairy breeds associations and Dairy breeder societies	
Funding requirement US\$ Bn : 3.000	The improved stocking of farms and ranches will improve farm and ranches production and productivity which is in line with the sector objective and NDP2.
Output : 37 Training, refreshing and facilitating AI and MOET technicians	
Funding requirement US\$ Bn : 2.000	Increased access to assisted reproductive technologies for improved breeds which is in line with the ASP and NDP2 for increased production and Productivity.
Output : 72 Government Buildings and Administrative Infrastructure	
Funding requirement US\$ Bn : 20.000	This creates enabling environment for staff most especially to respond on the budget crosscutting issue of gender.
Output : 27 Evaluation and multiplication of improved pasture and fodder germ-plasm	
Funding requirement US\$ Bn : 1.000	The improved pasture will lead to improved livestock production in terms of beef and milk leading to increased house hold income which is in line with NDP2.