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

V1: Vote Overview

I. Vote Mission Statement

Establish a comprehensive and sustainable National Animal Breeding Program which meets the commercial and developmental interests of the actors along the livestock sub-sector value chains.

II. Strategic Objective

1. Enhance Animal Genetic Improvement efforts for increased animal Production and Productivity.
2. Conservation of Biodiversity, Sustainable Utilization and Development of Indigenous Animal Genetic resources.
3. Strengthened Institutional capacity, growth and development.
4. Client oriented services, collaborations, and entrepreneurship.
5. Establish a National Animal information resource and development centre.

III. Major Achievements in 2020/21

Incredible progress has been made so far as per planned outputs for the FY2020/21;

1. Production and distribution of chicks to rural poultry farmers

- A total of 260,959 out of the annual target of 1,000,000 chicks were brooded from NAGRC&DB hatcheries and extended part of it to 500 women and 985 men, to promote income generation and boost household incomes. More chicks are expected to be hatched after operationalization of Kasolwe hatchery and this is meant to benefit rural communities.
- A total of 3,300 (males = 2016, females = 1284, youth = 2,089) out of an annual target of 10,000 poultry farmers were trained in poultry breeding and production techniques in Busoga and Buganda sub regions. The trainings will be rolled out to cover great Karamoja in the subsequent quarters.

2. Multiplication of pure Dairy animals & appropriate crosses

- A total of 409 out of the annual target of 1000 pure dairy calves were produced on NAGRC&DB Centre farms.
- Community breeding activities were conducted countrywide, with the aim of promoting livestock production productivity in hard to reaches areas in Busoga and Karamoja sub regions.

3. Promotion of beef cattle breeding

- A total of 174 farmers (112 men and 62 women) were recruited as elite beef farmers across the country.
- A total of 1,104 out of the annual target of 3,500 beef calves were produced on NAGRC&DB Centre farms.
- A total of 6000 doses of assorted synchronisation hormones were acquired to facilitate AI for beef breeding.
- Mass Artificial Insemination (AI) on and off NAGRC&DB centre farms was conducted to enhance production and productivity.

4. Production of semen and liquid nitrogen

- In an effort to promote Artificial Insemination (AI) and community breeding in general, a total of 18,389 out of the annual target 72,000 doses of semen were produced at the Bull stud.
- A total of 25,887 out of the annual target of 80,000 litres of liquid nitrogen were produced at NAGRC&DB liquid nitrogen plant and extended to farmers countrywide
- The liquid nitrogen plant in Mbarara was also commissioned to further boost livestock breeding and production.

5. Establishment Livestock Farm infrastructure to promote breeding and production;

Construction works on gene bank laboratories, establishment of farm structures and administrative infrastructure on NAGRC&DB centre farms is ongoing. Development of farm stead plans for Aswa, Ruhengyere, Rubona, Maruzi and Sanga NAGRC&DB farms is also ongoing.

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6. Evaluation and multiplication of improved pasture and fodder germ-plasm

- The entity has so far established and maintained 375 acres of improved pasture on NAGRC&DB farms; Lusenke, Kasolwe, Njeru, Aswa and Rubona, out of the annual target of 1250 acres. Bush clearing activities are ongoing to establish more pasture gardens for enhanced animal feeding.
- A total of 961 out of 6000 farmers were trained in pasture establishment and dry season feeding.

7. Industrial production of animal feeds

Procurements to operationalise the Kasolwe feed mill will be concluded in Q3 and 4. The feed plant has already been connected to a power line to effect production of feeds.

8. Breeding & multiplication of meat goats

In order to increase availability of appropriate breeding stock of goats to farming communities; a total of 571 out 2000 kids were produced on NAGRC&DB Centre farms.

9. Filling staffing gaps to improve performance

NAGRC&DB managed to fill a number of critical positions in its structure, to boost the human resource capacity; something that has also been limiting optimal performance for a number of years. Positions filled ranged from Senior Farm Managers, Assistant Manager Planning, Monitoring and Evaluation Officer, Estates Officers, to mention but a few.

IV. Medium Term Plans

1. Production, processing, packaging, storage, marketing, and exporting of differentiated animal feeds to regional and international markets.
2. Establishing livestock farm service centres in all regions.
3. Establishing state of art farm structures on all NAGRC & DB centre farms.
4. Production of semen for export to regional and international market.
5. Production of liquid nitrogen for export to regional and international market.
6. Production of embryos for export to regional and international market.
7. Stock all NAGRC&DB centre farms with superior breeding stock.
8. Revamp the National Livestock data bank.
9. Boosting human capital stock i.e animal breeding scientists, technicians etc

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V. Snapshot Of Medium Term Budget Allocations

Table 5.1: Overview of Vote Expenditures (UShs Billion)

	2019/20 Outturn	2020/21		2021/22	MTEF Budget Projections				
		Approved Budget	Expenditure by End Dec		2022/23	2023/24	2024/25	2025/26	
Recurrent	Wage	4.027	4.636	1.355	4.636	4.868	4.868	4.868	4.868
	Non Wage	4.427	7.078	0.771	6.335	6.335	6.335	6.335	6.335
Devt.	GoU	52.906	61.344	3.925	61.344	61.344	61.344	61.344	61.344
	Ext. Fin.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GoU Total		61.360	73.059	6.051	72.315	72.547	72.547	72.547	72.547
Total GoU+Ext Fin (MTEF)		61.360	73.059	6.051	72.315	72.547	72.547	72.547	72.547
Arrears		0.000	0.141	0.040	1.047	0.000	0.000	0.000	0.000
Total Budget		61.360	73.199	6.091	73.362	72.547	72.547	72.547	72.547
A.I.A Total		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grand Total		61.360	73.199	6.091	73.362	72.547	72.547	72.547	72.547
Total Vote Budget Excluding Arrears		61.360	73.059	6.051	72.315	72.547	72.547	72.547	72.547

Table 5.2: Budget Allocation by Programme (UShs Billion)

<i>Billion Uganda Shillings</i>	2021/22 Draft Estimates		
	GoU	Ext. Fin	Total
Agro-Industrialisation	72.315	0.000	72.315
Grand Total :	73.362	0.000	73.362
Total excluding Arrears	72.315	0.000	72.315

VI. Budget By Economic Classification

Table V6.1 2020/21 and 2021/22 Budget Allocations by Item

<i>Billion Uganda Shillings</i>	2020/21 Approved Budget				2021/22 Draft Estimates		
	GoU	Ext. Fin	AIA	Total	GoU	Ext. Fin	Total
Output Class : Outputs Provided	30.384	0.000	0.000	30.384	55.655	0.000	55.655
211 Wages and Salaries	5.362	0.000	0.000	5.362	5.252	0.000	5.252
212 Social Contributions	0.464	0.000	0.000	0.464	0.464	0.000	0.464
213 Other Employee Costs	1.478	0.000	0.000	1.478	1.715	0.000	1.715
221 General Expenses	3.476	0.000	0.000	3.476	1.532	0.000	1.532
222 Communications	0.322	0.000	0.000	0.322	0.731	0.000	0.731
223 Utility and Property Expenses	1.269	0.000	0.000	1.269	1.100	0.000	1.100
224 Supplies and Services	11.682	0.000	0.000	11.682	33.321	0.000	33.321

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225 Professional Services	1.358	0.000	0.000	1.358	2.511	0.000	2.511
226 Insurances and Licenses	0.000	0.000	0.000	0.000	0.200	0.000	0.200
227 Travel and Transport	2.821	0.000	0.000	2.821	4.119	0.000	4.119
228 Maintenance	1.953	0.000	0.000	1.953	2.387	0.000	2.387
273 Employer social benefits	0.000	0.000	0.000	0.000	0.020	0.000	0.020
281 Property expenses other than interest	0.061	0.000	0.000	0.061	0.304	0.000	0.304
282 Miscellaneous Other Expenses	0.140	0.000	0.000	0.140	2.000	0.000	2.000
Output Class : Capital Purchases	42.675	0.000	0.000	42.675	16.660	0.000	16.660
281 Property expenses other than interest	1.118	0.000	0.000	1.118	0.110	0.000	0.110
311 NON-PRODUCED ASSETS	1.130	0.000	0.000	1.130	0.150	0.000	0.150
312 FIXED ASSETS	38.764	0.000	0.000	38.764	16.400	0.000	16.400
314 INVENTORIES (STOCKS AND STORES)	1.663	0.000	0.000	1.663	0.000	0.000	0.000
Output Class : Arrears	0.141	0.000	0.000	0.141	1.047	0.000	1.047
321 DOMESTIC	0.141	0.000	0.000	0.141	1.047	0.000	1.047
Grand Total :	73.199	0.000	0.000	73.199	73.362	0.000	73.362
Total excluding Arrears	73.059	0.000	0.000	73.059	72.315	0.000	72.315

VII. Budget By Sub-Subprogramme , Department And Project

Table V7.1: Past Expenditure Outturns and Medium Term Projections by Sub-SubProgramme,Department and Project

Billion Uganda shillings	FY 2019/20 Outturn	FY 2020/21		2021-22 Proposed Budget	Medium Term Projections			
		Approved Budget	Spent By End Dec		2022-23	2023-24	2024-25	2025-26
56 Breeding and Genetic Development	61.360	73.199	6.091	73.362	72.547	72.547	72.547	72.547
01 Headquarters-NAGRC&DB	5.082	6.769	1.577	12.018	11.202	11.202	11.202	11.202
02 Dairy cattle	0.097	0.300	0.051	0.000	0.000	0.000	0.000	0.000
03 Beef cattle	0.112	0.451	0.077	0.000	0.000	0.000	0.000	0.000
04 Poultry	0.729	1.100	0.116	0.000	0.000	0.000	0.000	0.000
05 Small ruminants & non ruminants	0.082	0.400	0.072	0.000	0.000	0.000	0.000	0.000
06 Pasture and feeds	0.160	0.400	0.039	0.000	0.000	0.000	0.000	0.000
08 National Animal Data Bank	0.022	0.200	0.030	0.000	0.000	0.000	0.000	0.000
09 Fish breeding and production	0.027	0.235	0.036	0.000	0.000	0.000	0.000	0.000
10 Assisted Reproductive Technologies (ARTs)	2.145	2.000	0.167	0.000	0.000	0.000	0.000	0.000
1325 NAGRC Strategic Intervention for Animal Genetics Improvement Project	52.906	61.344	3.925	59.544	59.544	59.544	59.544	59.544
1752 Retooling of the National Animal Genetic Resources Centre and Data Bank	0.000	0.000	0.000	1.800	1.800	1.800	1.800	1.800
Total for the Vote	61.360	73.199	6.091	73.362	72.547	72.547	72.547	72.547

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Total Excluding Arrears	61.360	73.059	6.051	72.315	72.547	72.547	72.547	72.547
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VIII. Sub-SubProgramme Performance and Medium Term Plans

Table V8.1: Sub-SubProgramme Outcome and Outcome Indicators

Sub-SubProgramme : 56 Breeding and Genetic Development					
Objective :	<ol style="list-style-type: none"> 1. Enhance Animal Genetic Improvement efforts for increased animal Production and Productivity. 2. Conservation of Biodiversity, Sustainable Utilization and Development of Indigenous Animal Genetic resources. 3. Strengthened Institutional capacity, growth and development. 4. Client oriented services, collaborations, and entrepreneurship. 5. Establish a National Animal information resource and development centre. 				
Responsible Officer:	Dr. Peter Beine Ahimbisibwe Ag. Executive Director				
Outcome:	Increased availability and access to improved genetics.				
1. Increased production and productivity of priority and strategic commodities					
Outcome Indicators	Performance Targets				
			2021/22	2022/23	2023/24
	Baseline	Base year	Target	Projection	Projection

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• Percentage change in the utilization of improved germplasm.	12%	2020	13.5%	15%	20%
Project: 1325 NAGRC Strategic Intervention for Animal Genetics Improvement Project					
Budget Output: 14 Multiplication of pure beef breeds & appropriate crosses					
Number of improved beef animals produced on and off NAGRC&DB Center farms and ranches			3,600	3,700	3,780
Budget Output: 19 Production and distribution of chicks					
Quantity of improved bred chicken produced and extended to farmer households.			1,000,000	1,040,000	1,070,000
Budget Output: 21 Breeding & multiplication of meat goats					
Number of Improved bred Goats produced / extended to goat farmer households.			3,000	3,200	3,450
Budget Output: 23 Breeding & multiplication of pigs					
Quantity of improved bred pigs produced and extended to pig farmer genetics.			550	570	600
Budget Output: 27 Evaluation and multiplication of improved pasture and fodder germ-plasm					
Number of acres of various pasture germplasm established on NAGRC&DB Center farms and ranches			1,525	1,560	1,585
Number of farmers trained in pasture establishment and dry season feeding.			1,020	1,035	1,042
Budget Output: 37 Training, refreshing and facilitating AI and MOET technicians					
Number of assisted reproductive technologies technicians (AI, ET, NPD) trained/refreshed			250	270	300
Budget Output: 38 Providing breeding-training to farmers and other stakeholders along the ARTs value chain					
Number of farmers and technicians sensitized in assisted reproductive techniques (AI, ET, NPD)			90,000	100,000	102,000
Budget Output: 39 Production, procurement and sale of semen, eggs, ova, embryos and their associated equipment					
Quantity of Doses of semen produced and extended to dairy and beef farmers.			75,000	80,000	82,000
Budget Output: 40 Production, procurement and sale of liquid nitrogen and associated equipment.					
Litres of liquid nitrogen produced			90,000	100,000	101,000
Budget Output: 72 Government Buildings and Administrative Infrastructure					
Number of administrative structures established.			30	32	34

IX. Major Capital Investments And Changes In Resource Allocation

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

FY 2020/21		FY 2021/22
Appr. Budget and Planned Outputs	Expenditures and Achievements by end Dec	Proposed Budget and Planned Outputs
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<i>Sub-SubProgramme : 01 56 Breeding and Genetic Development</i>		
Development Project : 1325 NAGRC Strategic Intervention for Animal Genetics Improvement Project		
Budget Output: 01 56 72 Government Buildings and Administrative Infrastructure		

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50 kms of NAGRIC&DB Centre farms (Nshara , Njeru, Ruhengyere , Maruzi, Bulago and Kasolwe) fenced. Ten(10) land titles secured for NAGRIC & DB Centre farms. A Farm Stead plan developed for each of the centre farms. Thirty nine (39) gender responsive government buildings and infrastructure constructed on the NAGRC&DB center farms (Lusenke, Kasolwe, Nshara, Bulago, Maruzi Aswa and Ruhengyere)	Development of farm stead plans for Aswa, Ruhengyere, Rubona, Maruzi and Sanga NAGRC&DB farms is ongoing. Community breeding activities are also ongoing countrywide. Construction works on gene bank laboratories, establishment of farm structures and administrative infrastructure on NAGRC&DB centre farms is ongoing.	1. All-inclusive animal breeding and production support facilities in NAGRC & DB Centre farms established. 2.Regional community breeding outreach satellite centres established. 3.Animal genetic resources learning centers constructed and equipped.	
Total Output Cost(Ushs Thousand)	20,287,617	139,484	10,760,000
Gou Dev't:	20,287,617	139,484	10,760,000
Ext Fin:	0	0	0
A.I.A:	0	0	0
Budget Output: 01 56 79 Acquisition of Other Capital Assets			
High quality animal genetics resources, Feed mill dryer, Apiary sites, Water reticulation,Bull stud fence, Honey processing unit, bee hives and fish fry centres acquired to enhance breeding across all agro ecological zones of Uganda	Procurement process for the acquisition of feed mill silos, honey processing equipment, goat AI kits and livestock for NAGRC&DB centre farms is ongoing.	Water reticulation systems and farm based valley tanks constructed to support livestock breeding and production on NAGRC&DB Centre farms.	
Total Output Cost(Ushs Thousand)	9,661,300	278,337	4,100,000
Gou Dev't:	9,661,300	278,337	4,100,000
Ext Fin:	0	0	0
A.I.A:	0	0	0
Development Project : 1752 Retooling of the National Animal Genetic Resources Centre and Data Bank			
Budget Output: 01 56 72 Government Buildings and Administrative Infrastructure			
		Refurbishment of NAGRC&DB headquarters and farm structures done	
Total Output Cost(Ushs Thousand)	0	0	600,000
Gou Dev't:	0	0	600,000
Ext Fin:	0	0	0
A.I.A:	0	0	0
Budget Output: 01 56 75 Purchase of Motor Vehicles and Other Transport Equipment			
		NAGRC&DB Centre farms supported with transport equipment for operational efficiency & effectiveness.	
Total Output Cost(Ushs Thousand)	0	0	700,000
Gou Dev't:	0	0	700,000
Ext Fin:	0	0	0
A.I.A:	0	0	0
Budget Output: 01 56 78 Purchase of Office and Residential Furniture and Fittings			
		NAGRC&DB Headquarters and Centre farms supported with ICT equipment to effectively manage the National Livestock Data Bank.	
Total Output Cost(Ushs Thousand)	0	0	500,000
Gou Dev't:	0	0	500,000
Ext Fin:	0	0	0
A.I.A:	0	0	0

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X. Vote Challenges and Plans To Improve Performance

Vote Challenges

1. Funding gap which limits the implementation of desired activities. There is a number of key unfunded priorities that are worth billions of Uganda shillings. For instance NAGRC&DB Centre farms like Rubona stock farm have great potential to promote apiary production but financial resources are very limiting.
2. Land encroachment on NAGRC&DB center farms that has affected proper planning for the center farms.
3. Shortage of animal feeds (Climate changes, invasive plants etc.)
4. Inadequate release of funds, this has affected the planned activities most especially capital works which require funds availability before committing Government.
5. Disease outbreaks on NAGRC&DB centre farms that have in most cases caused animal mortalities.
6. Inadequate wage bill, a factor which has hindered recruitment and retention of the required competent skilled personnel.
7. Inadequate livestock infrastructure at the centre farms which affects breeding and production programs.
8. Inadequate mobility to deliver community outreach training and breeding programs.
9. Inadequate machinery to mechanize farm operations. For example, one bull dozer that is available serves all the centre farms this has crippled farm operations. There is need for more equipment such as tractors, pasture harvesters for the smooth running of the farms.
10. The outbreak of Covid-19 pandemic has disrupted key activities like production and distribution of liquid nitrogen, semen, trainings of AI Technicians etc.

Plans to improve Vote Performance

1. Pushing for the review of Animal Breeding Act 2001, to effectively implement Animal Breeding Policy.
2. Continue pushing for the lifting of the wage ceiling to fill staffing gaps that have negatively affected organizational performance.
3. Revitalizing the commercial arm of NAGRC&DB.

XI Off Budget Support

Table 11.1 Off-Budget Support by Department and Project

N/A

XII. Vote Cross Cutting Policy And Other Budgetary Issues

Table 12.1: Cross- Cutting Policy Issues

Issue Type: **HIV/AIDS**

Objective :	Create HIV/AIDS awareness among livestock farming communities
Issue of Concern :	Opportunistic infections arising from HIV&AIDS have affected livestock production and productivity among farming communities.
Planned Interventions :	1.NAGRC&DB will introduce dairy goats for adoption by the livestock rearing communities to avail milk rich in nutrients required for boosting the human immune system. 2. Sensitizing farmers during training on and off NAGRC&DB centre farms.
Budget Allocation (Billion) :	1.200
Performance Indicators:	1. Number of dairy goats introduced on NAGRC&DB Centre farms (Target= 3000) 2. Number of livestock farmers sensitized on HIV/AIDS (Target=10,000)

Issue Type: **Gender**

Objective :	To promote equity and gender in resource allocations.
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Issue of Concern :	1. Most women and youth have limited access to improved livestock breeds that are key in improving household incomes. 2. Most Districts/sub regions lack skilling/service/ breeding centers much needed for agricultural production and productivity.
Planned Interventions :	1. Multiplication and distribution of commercial poultry birds, with special consideration of women, youth and PWDs. 2. Establishing skilling/ service/ livestock breeding centres in Busoga and greater Karamoja
Budget Allocation (Billion) :	10.000
Performance Indicators:	1. Number of poultry birds produced and distributed to women, men and youth (Target=1,000,000). 2. No of skilling/ service/ livestock breeding centres established in Busoga and greater Karamoja (Target =2).

Issue Type: **Environment**

Objective :	To protect the environment from degradation.
Issue of Concern :	One livestock unit of approximately 250 kg requires one acre of grazing land per year and top soil that supports growth of pasture germplasm. Over grazing generally causes soil erosion.
Planned Interventions :	1. Practicing agroforestry on NAGRC&DB Centre farms 2. Establishing farm structures on NAGRC &DB centre farms, with proper waste management systems.
Budget Allocation (Billion) :	4.700
Performance Indicators:	1. Number of forage trees planted on NAGRC&DB centre farms (Target =4000).

XIII. Personnel Information

Table 13.1 Staff Establishment Analysis

Title	Salary Scale	Number Of Approved Positions	Number Of Filled Positions
Assistant manager ARTs	FIXED	1	1
Deputy TMB	FIXED	1	0
Technical Manager Breeding	N2A	1	1
Technical Manager Production	N2A	1	0
Manager Data Bank	N2B	1	0
Manager Finance & Administration	N2B	1	1
Deputy Technical Manager Production	N3A	1	1
Corporation Secretary	N3B	1	0
Marketing executive/PR	N3B	1	0
Regional Breeding Manager	N4A	4	0
Asst. Manager - Satellite Centres/ Associations	N4B	1	0

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In-Charge Molecular Genetics	N4B	1	0
Nutritionist	N4B	1	1
Range Ecologist	N4B	1	0
Sire Stud Manager	N4B	1	1
Accountants (Revenue & Expenditure)	N4C	2	1
Assistant Manager ICT	N4C	1	1
Assistant Manager Livestock registry	N4C	1	0
Asst. Manager Human Resources	N4C	2	2
Internal Auditor	N4C	1	1
Principal Administrative Secretary	N4C	1	0
Senior Farm Manager	N5A	6	6
Veterinary Officer	N5B	6	0
In -charge Laboratory	N6A	4	2
Estates Officer - Electrical	N6A	1	0
Estates Officer - Mechanical	N6A	1	1
In-Charge Artificial Insemination & NPD	N6A	1	1
In-Charge Field Recording	N6A	1	1
In-Charge MOET	N6A	1	0
Livestock Librarian	N6A	1	0
Livestock Technician	N6A	4	2
Programme Officer (Cattle)	N6A	1	0
Programme officer (Fish)	N6A	1	1
Programme Officer (Poultry)	N6A	1	1
Programme Officer (Small ruminants)	N6A	1	1
Programme Officer (Pigs)	N6A	1	1
Human resource Officer	N6B	2	2
Monitoring and Evaluation Officer	N6B	1	1
Planner	N6B	1	0
Procurement Officer	N6B	1	1
Senior Accounts Assistant	N6C	2	1
Farm Manager	N6D	6	2
Animal Husbandry Officer	N7A	26	16
Fisheries Assistant	N7A	3	0
Stores/ Farm Accounts Assistant	N7A	12	2

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Tractor Operator	N7A	11	4
Accounts Assistant	N7B	2	2
Ass. Inventory Management Officer	N7B	2	2
Assistant Procurement Officer	N7B	3	1
Semen Collector/Sire Handler	N7C	7	0
Driver	N8A	1	1
Driver (Headquarters and farms)	N8A	3	3
Estates Attendant	N8A	3	1
Farms Records Assistant	N8A	12	12
Office Attendant	N8B	12	0
Office Records Assistant	N8B	2	2
Askari	N9A	4	4
General Support Staff	N9A	12	12
Herdsmen	N9B	90	90
Executive director	NE1	1	1

Table 13.2 Staff Recruitment Plan

N/A

Table 14.1 NTR Forecast