



# Annual report on the implementation of the External Bursary Scheme



2012/13



agriculture,  
forestry & fisheries

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# **Annual report on the implementation of the External Bursary Scheme**

**2012/13**

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## ACRONYMS

ARC	Agricultural Research Council
ASDP	Academic Support and Development Programme (run by the Faculty of Engineering at the University of KwaZulu-Natal)
B.A.	Bachelor of Arts
B. Agric.	Bachelor of Agriculture
B.Com.	Bachelor of Commerce
B.Sc.	Bachelor of Science
B.Tech.	Bachelor of Technology
B.V.Sc.	Bachelor of Veterinary Science
DAFF	Department of Agriculture, Forestry and Fisheries
DIRCO	Department of International Relations and Cooperation
GADI	Grootfontein Agricultural Development Institute
SET	Sector Education and Training
FET	Further Education and Training
GCIS	Government Communication and Information System
HET	Higher Education and Training
Hons	Postgraduate degree (Honours)
HRD	Human Resources Development
M.Sc.	Master's degree in Science
M.Tech	Master' degree in Technology
Nat. Dipl.	National Diploma
NBC	National Bursary Committee
NRF	National Research Foundation
NSF	National Skills Fund
NSFAS	National Students' Financial Aid Scheme
Ph.D.	Postgraduate degree (Doctorate)
SAQA	South African Qualifications Authority
UKZN	University of KwaZulu-Natal

## DEFINITION OF TERMS

<b>Academic performance</b>	Performance or progress of bursary holders through monthly tests, assignments, tutorials and examinations in order to assess their academic progress
<b>Bursary holder</b>	Any person to whom a study bursary/aid is granted
<b>Career awareness schools</b>	The best performing schools which were identified by the DAFF in previously disadvantaged communities to create agriculture, forestry and fisheries awareness among school-going youth and to identify performing learners to be worthy recipients of the bursary fund
<b>External Bursary Scheme</b>	A scheme of the DAFF that offers financial assistance to deserving students to further their studies at institutions of higher learning
<b>Fail</b>	The performance of bursary holders who are regarded as incompetent and were retained at the same level of study
<b>Institution</b>	Any SAQA-recognised university, university of technology, college or secondary school inside the boundaries of South Africa
<b>Pass</b>	The performance of bursary holders who are regarded as competent and proceed to the next level of study
<b>Study field</b>	Any department/faculty approved degree or diploma at an institution
<b>Student counselling and support</b>	Support given to bursary holders in the form of group/individual guidance to explore and remedy the academic problems and challenges that might affect the performance of a bursary holder



## FOREWORD BY THE ACTING DIRECTOR-GENERAL



Mr Mortimer Manny

It gives me great pleasure to present the 2012/13 Annual Report on the implementation of the External Bursary Scheme of the Department of Agriculture, Forestry and Fisheries.

The Department of Agriculture, Forestry and Fisheries (DAFF) introduced the External Bursary Scheme in 2004 in response to the government's call to bridge skills gap, promote rural development and to eliminate skewed participation in South Africa. The scheme is used as a vehicle to create a pool of researchers, scientists, skilled professionals and technicians in areas regarded as scarce and critical. Since the inception of the scheme, 1 091 young people benefited from financial assistance to further their studies and 478 successfully completed their qualifications. Of the 1 091 bursary beneficiaries, 254 constitute the 2012 academic year bursary beneficiaries.

The scheme is implemented through an approved policy and its recruitment drive targets young people from previously disadvantaged communities with good symbols in Mathematics and Physical Science to be recipients of DAFF bursaries. The scheme is further used as a skills pipeline to contribute towards the promotion of inclusive economic growth, job creation and food security by ensuring a constant supply of required skilled personnel in the highly competitive agriculture, forestry and fisheries industries.

The report focuses on the activities relating to the 2012/13 bursary awards and the management processes in terms of recruitment, selection, monitoring and evaluation of the academic performance, counselling support services offered to bursary holders and analysis of bursary holders who completed their studies.

In conclusion, the report provides insight into the significant contribution that the department is making in addressing the shortage of scarce and critical skills in agriculture, forestry and fisheries. The DAFF will remain committed to ensure increased production in the agriculture, forestry and fisheries industries by nurturing a pool of experts.

The 2012/13 report is the eighth of a series of reports published by the department on the implementation of the scheme. These reports can be accessed on the website of the department at [www.daff.gov.za](http://www.daff.gov.za) >> Food Security and Agrarian Reform Branch >> Sector Education and Training >> Reports.

A handwritten signature in black ink, appearing to read 'KCM Manny'.

**Mr KCM Manny**  
**ACTING DIRECTOR-GENERAL**



## EXECUTIVE SUMMARY

The 2012/13 *Annual report on the implementation of the External Bursary Scheme* covers activities relating to the 2012/13 bursary awards and the management processes in terms of recruitment, selection, monitoring and evaluation of the academic performance as well as counselling support services offered to bursary holders.

The report indicates that a total of 254 students were awarded bursaries to further their studies during the 2012 academic year. In terms of race, 200 (78,7%) Africans, 19 coloureds (7,5%), 14 Indians (5,5%) and 21 whites (8,3%) benefited from the scheme in 2012. With regard to gender, 106 (41,7%) are males and 148 (58,3%) are females. Out of the 254 bursary holders, 96 constituted new intake additional to the 158 beneficiaries who were already in the system. Of the new intake, 68 were undergraduates and 28 postgraduates (B.Tech. Hons, Masters, and Ph.D.).

Monitoring and evaluation are critical elements in ensuring the success of the implementation of the scheme. Bursary monitoring meetings as well as one-on-one student support meetings were conducted at various institutions of higher learning. The success of the External Bursary Scheme is measured through the academic performance of students and is a critical tool to measure return on investment. Of the 254 beneficiaries who were awarded bursaries, 249 wrote their 2012 end-of-year examinations. Of the 249, 231 (92,7%) passed and 18 (7,3%) failed. Despite the support given to bursary holders, six of them discontinued their studies owing to poor performance, misconduct and ill health.

Regarding analysis of return on investment using academic performance as a tool, 60 beneficiaries, consisting of undergraduate and postgraduate students, successfully completed their studies in 2012.

## 1. BACKGROUND AND MANAGEMENT PROCESSES

### 1.1 Introduction

The Department of Agriculture, Forestry and Fisheries (DAFF) introduced the External Bursary Scheme in 2004 in response to government's call to bridge the skills gap, promote rural development and to eliminate skewed participation in South Africa. The scheme is used as a vehicle to create a pool of researchers, scientists, skilled professionals and technicians in areas regarded as scarce and critical in agriculture, forestry and fisheries.

The scheme is implemented through an approved policy and its recruitment drive targets young people from previously disadvantaged and poverty stricken rural communities with good symbols in Mathematics and Physical Science to be recipients of DAFF bursaries to further their studies in one of the identified scarce and critical skills in agriculture, forestry and fisheries. The scheme is further used by DAFF as a skills pipeline to contribute towards the promotion of inclusive economic growth, job creation and food security by ensuring a constant supply of required skilled personnel in the highly competitive agriculture, forestry and fisheries industry.

Currently the scheme receives a budget of R15,7 million of which R12,5 million is transferred to the National Students' Financial Aid Scheme (NSFAS) solely to be administered. The allocation of bursaries to deserving students is undertaken by the National Bursary Committee guided by the 14-point system criteria as outlined in section 7.2 of the approved DAFF's *External Bursary Policy and Procedures*. The implementation, monitoring, and evaluation of the External Bursary Scheme reside with the Directorate: Sector Education and Training.

Since the inception of the scheme in 2004, 1 091 young people have benefited from a variety of bursary awards. Of this total, 478 successfully completed their tertiary qualifications.

### 1.2 Objectives

The primary objective of the External Bursary Scheme is to contribute towards human resource development in the agriculture, forestry and fisheries sectors, in line with the following strategic objectives:

#### 1.2.1 New entrants

To encourage and enable learners at pretertiary level to identify and nurture their potential at an early stage and to have more scientists at the highest level, relevant to the present and future market needs of the sector and the economy.

### 1.2.2 Access

To increase the number of scientists in the agriculture, forestry and fisheries designated groups and consequently to increase the number of farmers from designated groups at commercial level.

### 1.2.3 Competitiveness

To contribute towards making the agriculture, forestry and fisheries sectors more competitive and more representative of South Africa's demographics by providing learning opportunities for those who were previously marginalised.

### 1.2.4 Needs directed

To focus on the needs of the agriculture, forestry and fisheries sectors.

### 1.2.5 Redress

To address the government's transformation processes and skewed participation in the agriculture, forestry and fisheries sectors.

## 1.3 Bursary management process

### 1.3.1 Advertisement of bursary awards

The process of advertising bursaries starts with the collection of information on the prioritised scarce and critical skills in agriculture, forestry and fisheries from technical line function directorates within the DAFF, provincial departments of agriculture and relevant stakeholders across the agriculture, forestry and fisheries sectors using the needs analysis questionnaire. The needs analysis questionnaires were sent to all relevant stakeholders in April 2011. The information on scarce skills collected from the needs analysis were analysed and the following fields of studies were prioritised for the 2012 academic year:

- Bachelor of Veterinary Science (B.V.Sc.)
- B.Sc. Bioresource Engineering
- B.Sc. Viticulture and Oenology
- B.Sc. Food Science
- B.Sc. Agric. Entomology
- B.Sc. Agric. Plant Pathology
- B.Sc. Soil Science
- B.Sc. Agronomy
- B.Sc. Pasture Science
- B.Sc. Genetics
- B.Sc. Forestry and Wood Science
- B.Sc. Marine Biology
- B.Sc. Oceanography and Marine Biology
- B.Sc. Ichthyology, specialising in Aquaculture
- B.Sc. Zoology, specialising in Marine Biology/Ichthyology
- Nat. Dipl. Food Technology
- Nat. Dipl. Forestry
- Nat. Dipl. Oceanography
- Postgraduate (B.Tech Hons, Masters and Ph.D.) in relevant agriculture, forestry and fisheries study fields linked to the DAFF priority research projects.

Based on the skills that were identified and prioritised, an advert was compiled and published in the *City Press*, *Isolezwe*, *Cape Argus*, *Daily Sun* and *The Star* in June 2011 with the assistance and guidance from the Directorate: Communication Services. In addition to the national print media advertisements, the opportunities were also advertised through the website of the DAFF.

Promotion of the DAFF's 2012 external bursary opportunities was also done through the distribution of posters during July/August 2011 to institutions of higher learning, colleges of agriculture, high schools, community libraries, the Agricultural Research Council, the Land Bank, provincial departments of agriculture as well as noticeboards of the department's buildings in Pretoria (Agriculture Place, Sefala, Harvest House, Delpen and Silverton).

In response to the 2012 advert, a total of 2 623 (two thousand six hundred and twenty-three) applications from potential applicants were received, captured and analysed as follows:

• Bachelor of Veterinary Science	165
• B.Sc. Bioresource Engineering	52
• B.Sc. Viticulture and Oenology	10
• B.Sc. Food Science	62
• B.Sc. Genetics	72
• B.Sc. Plant Pathology	25
• B.Sc. Entomology	03
• B.Sc. Soil Science	83
• B.Sc. Agronomy	77
• B.Sc. Pasture Science	25
• B.Sc. Forestry and Wood Science	19
• B.Sc. Marine Biology	17
• B.Sc. Oceanography and Marine Biology	22
• B.Sc. Ichthyology, specialising in Aquaculture	06
• B.Sc. Zoology, specialising in Marine Biology/Ichthyology	03
• Nat. Dipl. Food Technology	109
• Nat. Dipl. Oceanography	23
• Nat. Dipl. Forestry	110
• Total irrelevant	1 740
<b>Total applications received</b>	<b>2 623</b>

Out of the total of 2 623 applications received, 883 were relevant and fundable and 1 740 were irrelevant because applicants applied for fields of study that were not advertised. Letters of regret were sent to 1 740 applicants who applied for irrelevant fields of study; and advice was provided in the letters to rather consider study fields sponsored by the DAFF External Bursary Scheme.

### 1.3.2 Selection of qualifying applicants

The entry requirements for all the fields of study vary. However, all of them require matriculation exemption with a good pass in Physical Science and Mathematics for admission. The selection of qualifying candidates is undertaken by National Bursary Committee as outlined in section 7.2 of the DAFF's *External Bursary Scheme Policy and Procedure*. The selection of qualifying candidates is done by applying the 14-point system, which takes into account: race, gender, disability, academic performance and the economic and financial status of the candidate. The National Bursary Committee comprises 12 members made up of representatives from the following:

- Nine provincial departments of agriculture (one HRD Manager from each province)
- Director: Sector Education and Training from the DAFF
- One representative from the Land Bank
- One representative from the Agricultural Research Council (ARC).

The National Bursary Committee meeting to finalise the selection of qualifying applicants was held on 18 January 2012 and as the highest decision-making body, the committee agreed on the following criteria for the 2012 awards:

- that the total number of bursary awards for the 2012 academic year should be based on the total budget available, also taking into consideration savings accruing from completed bursary holders as at the end of the 2011 academic year;

- that based on what DAFF can ensure is available for 2012, which is R3 805 000 (three million, eight hundred and five thousand rand) a total of 50 (fifty) awards should be approved by the NBC;
- that in case additional funds are secured to augment the R3 805 000,00 budget, additional awards shall be made to qualifying candidates, using the 14-point scale and some of the fields of study shall be prioritised above others based on their level of scarcity. These include (but not limited to) B.V.Sc., B.Sc. Bioresource Engineering, B.Sc. Viticulture and Oenology, B.Sc. Marine Biology and B.Sc. Forestry and Wood Science;
- that the approved departmental 14-point system shall be employed in the selection of 50 successful candidates for 2012;
- That based on a record of 883 (eight hundred and eighty-three) relevant applications received for various study fields for 2012, high 14-point system scores with outstanding performance in Mathematics and Physical Science shall be used in awarding bursaries for 2012.
- that as mitigation against the risk of a high failure rate, a 10-points base on the 14-point system shall be used as a minimum score or an average of 60% academic performance in Mathematics and Physical Science and shall be used as minimum if a score of below 10 is considered for the 2012 bursary awards allocations;
- that all learners from the FET “DAFF Career Awareness Schools” who qualify for university admission shall automatically qualify for bursary awards, provided that their average academic performance is 60% in Mathematics and Physical Science;
- that people with disabilities who secured admission at institutions of higher learning shall be treated as an exception, provided that their average academic performance is 60% in Mathematics and Physical Science;
- that in the awarding of bursaries the NBC shall fulfil the sector strategic objective of elimination of skewed participation in agriculture, forestry and fisheries in line with the demographics of the country; and
- that the decisions of the NBC as an approved statutory structure to oversee the national bursary scheme of DAFF shall be final and no further discussions shall be entered into between members of the public and the Department of Agriculture, Forestry and Fisheries.

Based on the criteria agreed upon by the committee, the following numbers of applicants were awarded bursaries per field of study:

• Bachelor of Veterinary Science	10
• B.Sc. Bioresource Engineering	12
• B.Sc. Viticulture and Oenology	02
• B.Sc. Food Science	02
• B.Sc. Genetics	05
• B.Sc. Plant Pathology	01
• B.Sc. Entomology	01
• B.Sc. Soil Science	02
• B.Sc. Agronomy	02
• B.Sc. Pasture Science	02
• B.Sc. Forestry and Wood Science	01
• B.Sc. Marine Biology	02
• B.Sc. Oceanography and Marine Biology	02
• B.Agric. Viticulture	04
• National Senior Certificate	06
• Nat. Dipl. Forestry	03
• Nat. Dipl. Food Technology	02
• Nat. Dipl. Oceanography	02
• Diploma in Agriculture	07
• Postgraduate Diploma in Higher Education	01

• B.Tech.	01
• Honours	05
• M.Tech.	04
• Masters (South Africa)	09
• Masters (international)	07
• Ph.D. (international)	01
<b>Total awards</b>	<b>96</b>

### 1.3.3 Placement of bursary holders at the various institutions of higher learning

The placement of bursary holders is the critical role of the Bursary Student Counsellor. During January 2012, the Bursary Student Counsellor assisted new bursary awardees with their registrations, securing of accommodation and movement from their respective homes to the institutions of higher learning where they have been admitted for their studies. The process involves working closely with faculty administrators and financial aid officers within the institutions where they have been admitted. The Bursary Student Counsellor ensures that bursary holders have packed their luggage (clothes, toiletries, bedding, cooking utensils, etc.) and have direction maps for their destinations, where they will be accommodated and at which offices to start once they have arrived at the institutions of higher learning.

## 2. ANALYSIS OF THE 2012 BURSARY AWARDS

### 2.1 Breakdown of all bursary awards for the 2012 academic year

In 2012, 96 new beneficiaries were awarded bursaries in addition to the 158 bursary holders who were already in the system.

**TABLE 1: Breakdown of all 2012 bursary awards [n = 254]**

Field of study	Race				Gender				Total
	African	Coloured	Indians	White	Male		Female		
	No.	No.	No.	No.	No.	%	No.	%	
B.V.Sc.	10	4	10	2	4	15,4	22	84,6	26
B.Sc. Viticulture and Oenology	6	0	0	0	2	33,3	4	66,7	6
B. Agric. Viticulture	3	3	1	2	5	55,6	4	44,4	9
B.Sc. Bioresource Engineering	23	0	2	2	14	51,9	13	48,1	27
B.Sc. Agric. Economics	11	1	0	0	5	41,7	7	58,3	12
B.Com. Agric. Business Management	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Food Science	9	0	0	0	3	33,3	6	66,7	9
B.Sc. Genetics	7	0	0	0	5	71,4	2	28,6	7
B.Sc. Plant Pathology	1	0	1	0	0	0,0	2	100,0	2
B.Sc. Entomology	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Soil Science	6	0	0	0	3	50,0	3	50,0	6
B.Sc. Agronomy	3	0	0	1	1	25,0	3	75,0	4
B.Sc. Pasture Science	7	0	0	0	2	28,6	5	71,4	7
B.Sc. Forestry Science	6	0	0	5	7	63,6	4	36,4	11
B.Sc. Forestry and Wood Science	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Ichthyology, specialising in Aquaculture	0	0	0	1	1	100,0	0	0,0	1
B.Sc. Marine Biology	1	1	0	0	1	50,0	1	50,0	2
B.Sc. Oceanography and Marine Biology	1	0	0	1	1	50,0	1	50,0	2
Nat. Dipl. Forestry	4	0	0	0	1	25,0	3	75,0	4
Nat. Dipl. Food Technology	11	0	0	0	5	45,5	6	54,5	11
Nat. Dipl. Oceanography	2	2	0	0	1	25,0	3	75,0	4

**TABLE 1: Breakdown of all 2012 bursary awards [n = 254] (cont.)**

Field of study	Race				Gender				Total
	African	Coloured	Indians	White	Male		Female		
	No.				No.	%	No.	%	
Diploma in Agriculture	30	7	0	0	18	48,6	19	51,4	37
National Senior Certificate	11	0	0	2	3	23,1	10	76,9	13
Post graduate Diploma in Higher Education	1	0	0	0	1	100,0	0	0,0	1
B.Tech. Oceanography	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Animal Breeding (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Microbiology (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Zoology (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Com. Agric .Economics (Hons)	1	0	0	0	0	0,0	1	100,0	1
M.Tech. Animal Production	3	0	0	0	1	33,3	2	66,7	3
M.Tech. Agriculture	1	0	0	0	1	100,0	0	0,0	1
M.Tech. Forestry	0	0	0	1	1	100,0	0	0,0	1
M.Sc. Pasture Science	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Animal Production	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Aquaculture	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Veterinary Microbiology	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Food Science	2	0	0	0	0	0,0	2	100,0	2
M.Sc. Agronomy	2	0	0	0	0	0,0	2	100,0	2
M.Sc. Soil Science	2	0	0	0	1	50,0	1	50,0	2
M.Sc. Entomology	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Environmental Management	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Forestry Science	0	0	0	2	2	100,0	0	0,0	2
M.Sc. Forestry and Resource Management	0	1	0	0	1	100,0	0	0,0	1
M.Sc. Wood Science	0	0	0	1	1	100,0	0	0,0	1
M.Sc. Molecular and Cell Biology	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Aquatic Breeding (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Agronomy (international)	6	0	0	0	6	100,0	0	0,0	6
M.Sc. Animal Science (international)	2	0	0	0	2	100,0	0	0,0	2
M.Sc. Crop Cultivation (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Plant Quarantine (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Rural Development (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Zoology (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Agric. Economics (international)	4	0	0	0	1	25,0	3	75,0	4
Ph.D. Agronomy (international)	2	0	0	0	1	50,0	1	50,0	2
Ph.D. Rural Development (international)	1	0	0	0	0	0,0	1	100,0	1
Ph.D. Forestry Science	0	0	0	1	0	0,0	1	100,0	1
Ph.D. Animal Production	1	0	0	0	1	100,0	0	0,0	1
<b>Total</b>	<b>200</b>	<b>19</b>	<b>14</b>	<b>21</b>	<b>107</b>	<b>42,1</b>	<b>147</b>	<b>57,9</b>	<b>254</b>

Table 1 indicates that 200 Africans (78,7%), 19 Coloureds (7,5%), 21 Whites (8,3%) and 14 Indians (5,5%) were awarded bursaries to further their studies. The table further shows that in addition to the bursaries for undergraduate and postgraduate studies, bursaries were awarded to 13 high school learners from DAFF Career Awareness Schools.



## 2.2 Analysis of the 2012 new intake

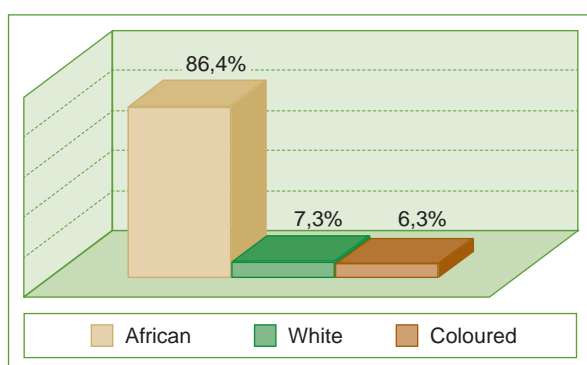
**TABLE 2: Breakdown of new intake of the 2012 DAFF bursary holders [n = 96]**

Field of study	Race				Gender				Total
	African	Coloured	Indians	White	Male		Female		
	No.	No.	No.	No.	No.	%	No.	%	
B.V.Sc.	7	1	0	2	2	20,0	8	80,0	10
B.Sc. Viticulture and Oenology	2	0	0	0	0	0,0	2	100,0	2
B. Agric. Viticulture	2	1	0	1	2	50,0	2	50,0	4
B.Sc. Bioresource Engineering	12	0	0	0	8	66,7	4	33,3	12
B.Sc. Food Science	2	0	0	0	0	0,0	2	100,0	2
B.Sc. Genetics	5	0	0	0	4	80,0	1	20,0	5
B.Sc. Plant Pathology	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Entomology	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Soil Science	2	0	0	0	1	50,0	1	50,0	2
B.Sc. Agronomy	2	0	0	0	1	50,0	1	50,0	2
B.Sc. Pasture Science	2	0	0	0	0	0,0	2	100,0	2
B.Sc. Forestry and Wood Science	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Marine Biology	1	1	0	0	1	50,0	1	50,0	2
B.Sc. Oceanography and Marine Biology	1	0	0	1	1	50,0	1	50,0	2
Diploma Agriculture	7	0	0	0	0	0,0	7	100,0	7
National Senior Certificate	5	0	0	1	2	33,3	4	66,7	6
Nat. Dipl. Forestry	2	0	0	0	1	50,0	1	50,0	2
Nat. Dipl. Food Technology	3	0	0	0	1	33,3	2	66,7	3
Nat. Dipl. Oceanography	0	2	0	0	0	0,0	2	100,0	2
Postgraduate Diploma in Higher Education	1	0	0	0	1	100,0	0	0,0	1
B.Tech. Oceanography	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Animal Breeding (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Microbiology (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Zoology (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Com. Agric. Economics (Hons)	1	0	0	0	0	0,0	1	100,0	1
M. Tech. Animal Production	3	0	0	0	1	33,3	2	66,7	3
M. Tech. Forestry	0	0	0	1	1	100,0	0	0,0	1
M.Sc. Pasture Science	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Aquaculture	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Veterinary Microbiology	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Food Science	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Agronomy	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Entomology	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Forestry Science	0	0	0	1	1	100,0	0	0,0	1
M.Sc. Forestry and Resource Management	0	1	0	0	1	100,0	0	0,0	1
M.Sc. Molecular and Cell Biology	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Agronomy (international)	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Animal Science (international)	2	0	0	0	2	100,0	0	0,0	2
M.Sc. Crop Cultivation (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Plant Quarantine (international)	1	0	0	0	0	0,0	1	100,0	1

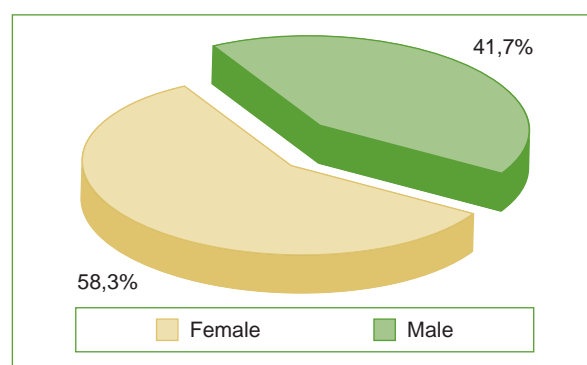
**TABLE 2: Breakdown of new intake of the 2012 DAFF bursary holders [n = 96] (cont.)**

Field of study	Race				Gender				Total
	African	Coloured	Indians	White	Male		Female		
	No.				No.	%	No.	%	
M.Sc. Rural Development (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Zoology (international)	1	0	0	0	0	0,0	1	100,0	1
Ph.D. Rural Development (international)	1	0	0	0	0	0,0	1	100,0	1
<b>Total</b>	<b>83</b>	<b>6</b>	<b>0</b>	<b>7</b>	<b>35</b>	<b>36,5</b>	<b>61</b>	<b>63,5</b>	<b>96</b>

Table 2 shows that 96 new beneficiaries were awarded bursaries for the 2012 academic year. A total of 68 were undergraduates, 28 postgraduates (B.Tech, Hons, M. Tech, M.Sc. and Ph.D.) and six were high school learners.



**GRAPH 1: Breakdown of new intake of DAFF bursary holders in terms of race for 2012 [n = 96]**



**GRAPH 2: Breakdown of new intake of DAFF bursary holders in terms of gender for 2012 [n = 96]**

In terms of the allocations depicted in Graph 1, Africans are the major beneficiaries with 83 (86,4%), followed by whites with seven (7,3%) and coloured with six (6,3%).

In terms of gender depicted in Graph 2, 58,3% of the beneficiaries are females and 41,7% are males.

### 2.3 Analysis of provinces and municipalities where bursary beneficiaries are coming from

The 2012 DAFF bursary awards were advertised in the national print and electronic media in June 2011 and as a result, candidates were recruited nationally. The tables below indicate the analysis of provinces and municipalities where beneficiaries came from:

**TABLE 3: Breakdown of all 2012 bursary holders according to provinces where they come from [n = 254]**

Provinces	Total
Eastern Cape	49
Free State	14
Gauteng	23
KwaZulu-Natal	56
Limpopo	45
Mpumalanga	10
North West	14
Northern Cape	11
Western Cape	32
<b>Total</b>	<b>254</b>

Table 3 shows that the highest number of beneficiaries (56) came from KwaZulu-Natal while the lowest number (10) came from Mpumalanga.

**TABLE 4: Breakdown of all 2012 bursary holders according to the municipalities/districts where they come from [n = 254]**

Municipality/district	Total	Municipality/district	Total	Municipality/district	Total
Abaqulisi	1	Jozini	1	Motsweding	1
Aganang	3	Kai Garib	1	Msunduzi	8
Albert Luthuli	3	Kharais	1	Mthatha	1
Alfred Ndzo	2	Khayelitsha	3	Mthonsaneni	1
Apel	1	King Sabata Dalidyebo	3	Nama Khoi	1
Amajuba	1	Kuils River	2	Ndlambe	1
Atlantis	1	Kuruman	1	Ngaka Modiri Molema	2
Bellville	1	Lady Frere	2	Nkonkobe	1
Bojanala	1	Ladysmith	1	Nongoma	1
Bushbuckridge	1	Lepelle Nkumpi	1	Nyandeni	1
Buffalo City	4	Mabatlane	1	Oostenberg	3
Butterworth	2	Madibeng	2	OR Tambo	5
Cape Town	8	Mahikeng	3	Pietermaritzburg	5
Capricorn	13	Mafube	1	Piketberg	1
Cederberg	2	Makhado	2	Polokwane	3
Cradock	1	Makhuduthamaga	2	Port Elizabeth	2
Concordia	2	Maluti-a-phofung	2	Prieska	1
Dr J.S. Moroka	1	Mangaung	8	Qumbu	1
East London	2	Margete	1	Sandton	1
Ekurhuleni	4	Matatiele	1	Setsoto	1
Elliot	4	Matlosana	1	Shwashweni	1
Elundini	1	Mbashe	2	Sisonke	1
Empangeni	2	Mbizana	3	Stellenbosch	8
Engobo	2	Mbombela	3	Thembisile Hani	1
eThekwini	5	Mbonambi	2	Thulamela	3
Frances Baard	1	Mhlathuze	9	Tshwane	11
Greater Giyani	1	Mhlontlo	2	Tygerberg	1
Greater Letaba	3	Middelburg	4	Tzaneen	1
Greater Taung	3	Middledrift	1	Mgungundlovu	1
Greater Sekhukhune	3	Midrand	1	Umkhanyakude	1
Helderberg	1	Mier	1	Umzimvubu	1
Hessequa	1	Mkhambathnini	1	Upington	1
Hibiscus	1	Mnquma	1	Uthukela	1
Hlabisa	1	Mogalakwena	2	Vhembe	4
Intsikayethu	2	Mogale City	1	Welkom	1
Inxuba Yethemba	2	Mopani	2	West Rand	1
Jan Kempdorp	1	Moqhaka	1	Whitelesea	2
Jansenville	1	Moretele	3	Witsenberg	1
Johannesburg Metro	3	Mosamane	1	<b>Total</b>	<b>82</b>
<b>Total</b>	<b>92</b>	<b>Total</b>	<b>80</b>	<b>Grand total</b>	<b>254</b>

Table 4 shows that the majority of bursary beneficiaries (13) came from Capricorn followed by Tshwane with 11.

### **3. BURSARY COUNSELLING SERVICES**

The Student Counselling Services is the DAFF's risk management strategy to ensure the success of the implementation of the scheme.

#### **3.1 Core functions of the Bursary Counselling Services**

- Give academic, career, social, personal and psychological support to bursary holders.
- Assess academic progress of bursary holders through semester tests, tutorials and assignments.
- Identify early warning signs of possible failure among bursary holders and providing mitigating solutions.
- Provide bursary holders with the life skills needed to deal with problems before these occur and to enhance students' personal, social and academic growth.
- Provide counselling support to bursary holders in the form of group and individual sessions, telephone calls, letters and e-mails.
- Source academic support for bursary holders from institutions of higher learning.
- Assist with admission and accommodation for first-year bursary holders in institutions of higher learning.
- Secure placement for bursary holders who need experiential training, vacation work, participation in the internship programme or permanent employment.

#### **3.2 Support given to bursary holders during the 2012 academic year**

The Bursary Student Counsellor provided continuous student support and counselling for the bursary holders through e-mails, telephone and fax. Challenges that bursary holders were facing during the 2012 academic year which the Bursary Student Counsellor handled included, but were not limited to the following:

- personal problems;
- residential problems;
- academic performance;
- health problems;
- family problems;
- time management and workload;
- difficulty in grasping concepts;
- eyesight problems; and
- delay in getting text books.

#### **3.3 Bursary monitoring meetings**

Monitoring and evaluation of academic performance of bursary holders is critical in ensuring the success of the Bursary Scheme. During 2012, physical visits to various institutions where DAFF bursary holders are attending and the NSFAS were conducted. The NSFAS, which administers the transfer of DAFF bursary funds to various institutions, was visited on 12 April and 5 December 2012 respectively. The purpose of the visit was as follows:

- define communication channels between the DAFF and NSFAS to enhance effective partnership;
- plan the schedule for the payment of claims to institutions;
- review payment processes and procedures for the 2012 academic year;
- the 2012/13 audited financial statements; and
- plan for 2013 academic year.

The dates, purpose and outcomes of monitoring visits conducted in all institutions of higher learning and FET colleges where DAFF bursary holders are attending are outlined in Tables 5 and 6.

**TABLE 5: Analysis of bursary monitoring visits conducted in various institutions of higher learning hosting DAFF bursary holders**

Date	Institution of learning visited	Purpose	No. of bursary holders attended	Duration of meetings in hours	Outcomes of meetings
28 Feb.	University of Witwatersrand	<ul style="list-style-type: none"> <li>To welcome and orientate new bursary holders</li> <li>To discuss DAFF's External Bursary Policy and Procedures</li> <li>To confirm that the modules registered by students comply with requirements of registered fields of study</li> <li>To finalise the fees breakdown structure and discuss it with the students and the management of the universities before sending it to NSFAS for processing</li> </ul>	3	1	<p>New students were inducted with regard to the following:</p> <ul style="list-style-type: none"> <li>strategies to cope with academic, personal, health, stress and relationship problems</li> <li>salient points relating to bursary policy and implications of the signed contract</li> <li>how to access academic support at the university</li> <li>benefits of the bursary award</li> </ul> <p>The proof of registration of each student was analysed and verified to ensure that it complies with the minimum requirements set for the registered field of study</p> <p>The method of payment of bursary benefits to students was discussed and agreed upon with the management of the universities and sent to NSFAS for processing</p> <p>The fees structure, which includes tuition, books, accommodation, meals and monthly allowances, was discussed and finalised with the students and management of the universities</p> <p>The meetings also helped bursary holders from the same institution to get to know each other and to form study groups</p>
29 Feb.	University of Pretoria		14	2	
07 Mar.	University of KwaZulu-Natal (Howard Campus)		6	2	
08 Mar.	University of KwaZulu-Natal (Pietermaritzburg Campus)		29	2	
12 Mar.	Tshwane University of Technology		1	1	
13 Mar.	Cape Peninsula University of Technology (Cape Town Campus)		4	2	
14 Mar.	University of Western Cape		3	2	
	Cape Peninsula University of Technology (Bellville Campus)		5	2	
	Elsenburg College		9	2	
15 Mar.	University of Stellenbosch		24	2	
16 Mar.	University of Cape Town		2	1	
22 Mar.	Nelson Mandela Metropolitan University		4	1	
27 Mar.	University of Fort Hare		12	2	
28 Mar.	Rhode University		3	2	
17 Apr.	University of Free State		9	2	
18 Apr.	GADI	43	2		

**TABLE 6: Analysis of the one-on-one bursary monitoring meetings conducted for DAFF bursary holders during the 2012 academic year**

Date	Institution of learning visited	Purpose	No. of bursary holders attended	Duration of meetings in hours	Outcomes of meetings
17 Apr.	University of Free State	<ul style="list-style-type: none"> <li>To conduct one-on-one meetings with each student to offer academic and counselling support</li> <li>To assess academic progress of each bursary holder</li> </ul>	9	15–30 minutes per student	<p>The Bursary Student Counsellor offered counselling support to students and also addressed their problems which included but not limited to the following:</p> <ul style="list-style-type: none"> <li>personal problems</li> <li>residential problems</li> </ul>

**TABLE 6: Analysis of the one-on-one bursary monitoring meetings conducted for DAFF bursary holders during the 2012 academic year (cont.)**

Date	Institution of learning visited	Purpose	No. of bursary holders attended	Duration of meetings in hours	Outcomes of meetings
18 Apr.	GADI	<ul style="list-style-type: none"> <li>To mobilise academic support within the institutions for struggling students</li> <li>To discuss placement opportunities or vacation work, experiential training and permanent employment for completing students</li> </ul>	43		<ul style="list-style-type: none"> <li>academic performance</li> <li>health problems</li> <li>family problems</li> <li>time management and workload</li> <li>difficulty in grasping concepts</li> <li>eyesight problems</li> <li>delay in getting texts books on time</li> </ul> <p>Academic support for all first year students at UKZN was sourced within their institutions as a measure to mitigate the high failure rate. An analysis of bursary holders who attended extra tutoring and mentorship programme is provided in Table 7</p>
24 Apr.	University of Venda		1		
25 Apr.	University of Limpopo		5		
07 May	University of Zululand		2		
08–10 May	University of KwaZulu-Natal (Howard Campus)		6		
09 May	University of KwaZulu-Natal (Pietermaritzburg Campus)		29		
15 May	University of Cape Town		2		
15 –16 May	Cape Peninsula University of Technology		9		
16 May	University of Western Cape		2		
17 May	University of Stellenbosch		23		
18 May	Elsenburg College		11		
22 May	University of Pretoria (Main Campus)		13		
23 May	University of Pretoria (Onderstepoort Campus)		10		
24 May	University of Witwatersrand		3		

### 3.4 Sourcing of academic support for bursary holders

The Bursary Student Counsellor collaborated with faculties, lecturers and student counselling and academic support structures within various institutions to help bursary holders cope with difficulties in their studies. Based on the analysis of academic performance compiled during monitoring visits, 32 students were identified as potential high-risk failures and academic support in the form of mentorships and extra tutoring was sourced to improve their academic success. Table 7 shows the analysis of the 32 students:

**TABLE 7: Analysis of bursary holders who received academic support [n = 32]**

Name of institution	No. attending	Fields of study	Level of study	Modules attended	Impact of the mentorship and extra tutoring programme	
					No. passed end of year exams	No. failed end of year exams
University of KwaZulu-Natal	10	• B.Sc. Bio-resource Engineering	1 <sup>st</sup> year	<ul style="list-style-type: none"> <li>Mathematics</li> <li>Physical Science</li> <li>Engineering Design</li> <li>Engineering Materials</li> <li>Computer 102</li> <li>Chemistry</li> </ul>	8	2

**TABLE 7: Analysis of bursary holders who received academic support [n = 32] (cont.)**

Name of institution	No. attending	Fields of study	Level of study	Modules attended	Impact of the mentorship and extra tutoring programme	
					No. passed end of year exams	No. failed end of year exams
University of KwaZulu-Natal (cont.)	5		3 <sup>rd</sup> year	• Computer programming • Mathematics	4	1
	3		4 <sup>th</sup> year	• Design Project	3	0
University of Pretoria	6	• B.V.Sc.	1 <sup>st</sup> year	• Chemistry • Physics and Biology • Mathematics	4	2
University of Stellenbosch	2	• B.Sc. Viticulture and Oenology	1 <sup>st</sup> year	• Oenology • Mathematics • Chemistry	2	0
	1	• B.Sc. Forestry and Wood Science	1 <sup>st</sup> year	• Biology • Physics • Forest Science	1	0
	2		2 <sup>nd</sup> year	• Forest Science • Biometry	2	0
University of Witwatersrand	3	• B.Sc. Genetics	1 <sup>st</sup> year	• Mathematics and Statistics • Chemistry	3	0
<b>Total</b>					<b>27</b>	<b>5</b>

Table 7 shows that 32 bursary holders benefited from academic support sourced with the University of KwaZulu-Natal, University of Pretoria, University of Stellenbosch and University of the Witwatersrand. Extra classes were conducted between 10:00 and 16:00 from Monday to Thursday during free periods for students at the University of KwaZulu-Natal. At the University of Pretoria extra academic support was provided on Wednesdays only and students were further registered for summer vacation classes which were conducted between 16:00 and 17:00 on Mondays and Wednesdays. Extra classes were conducted between 10:00 and 18:00 from Tuesday to Thursday at the University of Stellenbosch while extra tutoring for students at the University of Witwatersrand were conducted on Mondays and Wednesdays between 17:00 and 18:00. Out of the 32 bursary holders who attended extra tutoring classes, 27 managed to pass their end-of-year examinations and five failed despite extra tutoring and mentoring.

### 3.5 Support and interventions made by the technical tutor at the University of KwaZulu-Natal

During November 2011, DAFF signed the Service Level Agreement with the University of KwaZulu-Natal (UKZN) for appointment of a technical tutor to provide technical and academic support to the Bioresource Engineering students sponsored by DAFF. The rationale behind the appointment of the technical tutor is to increase the throughput of students studying Bioresource Engineering at UKZN. The responsibilities of the technical tutor are outlined as follows in the agreement:

- to provide supplemental technical tutoring and instruction for all students in Bioresource Engineering modules, i.e. in addition to normal lectures and tutorials offered by lecturers for modules. Supplemental tutoring and instruction will be coordinated with interventions supported by the Academic Support and Development Programme (ASDP) of the Faculty of Engineering at UKZN;
- to provide personal support and mentoring to the bursary students supported by the DAFF;
- to support the orientation and integration of first year bursary students to university studies in a cosmopolitan environment;
- to facilitate the placement of the bursary students for vacation work training and provide logistical support and arrangements for the bursary students to attend, for example, the compulsory Engineering Practice Workshop and Workshop Course;

- to work closely and liaise with the ASDP to quickly identify teaching and learning problems and to develop and implement remedial strategies as required; and
- to assist the DAFF in marketing Bioresource Engineering to prospective students and in recruiting suitable students to study Bioresource Engineering at UKZN.

Subsequently, the technical tutor was appointed and commenced with his responsibilities in February 2012. Activities implemented by the tutor included but were not limited to the following:

- **Profiling of individual DAFF bursary holder**

The tutor conducted an orientation and induction programme for DAFF bursary holders during February 2012. During the orientation, comprehensive profiles of all bursary holders were developed that included *inter alia* the demographic background, number of registered modules, needs of individual student as well as their personalities.

- **Monitoring of individual personal and academic progress**

A spreadsheet that tabulated all modules registered by the individual bursars was developed by the technical tutor wherein class tests, assignments, tutorials, predicates and final exam marks were recorded. This spreadsheet served as the basis for determining remedial actions that were to be directed to an individual student as per individual challenges and needs.

- **Remedial plans and performance tracking systems**

The students' academic progress was monitored and follow-up on remedial plans was done on an on-going basis. The technical tutor developed a very reliable and significant academic performance tracking system that is very effective in detecting the performance of a student and possible challenges facing the student at an early stage in order to provide mitigation measures. Bursary holders who were emotionally and psychologically challenged were referred to relevant professionals like a student psychologist for further help and those with academic challenges to relevant lecturers. This support was offered throughout the 2012 academic year and has helped to improve the performance of bursary holders.

- **Examination preparation workshops**

Examination preparation workshops were conducted by the tutor for all bursary holders in various levels of study, i.e. first to fourth year students. Extensive revision was done and students were also provided with previous examination papers and assisted on how to model the answers in response to a variety of questions. This approach helped to increase the pass rate in Bioresource Engineering from 77,3% (17 out of 22) in 2011 to 88% (22 out of 25) in 2012.

- **Facilitation of placement for vacation work for senior B.Sc. Bioresource Engineering bursars**

Placement for vacation work was sourced for second, third and fourth year students to complete their 12 weeks work integrated learning as a prerequisite for the successful completion of the B.Sc. Bioresource Engineering degree. Placement of students for vacation work was successfully done during the June and December 2012 school vacation.

**TABLE 8: Analysis of bursary holders who received vacation work placement from UKZN [ $n = 15$ ]**

Name of company	Level of study				No. of students supported
	1	2	3	4	
Department of Agriculture KwaZulu-Natal	0	0	1	1	2
School of Bioresources UKZN	0	0	0	1	1
Falcon Engineering Pietermaritzburg	0	0	1	0	1
ZZ2 Limpopo	0	0	1	0	1
Agri Development Agency Pietermaritzburg	0	0	2	0	2
Unitrans KZN	0	2	1	1	4
Irritech Pietermaritzburg	0	1	0	0	1
Department of Agriculture, Limpopo	1	1	1	0	3
<b>Total</b>	<b>1</b>	<b>4</b>	<b>7</b>	<b>3</b>	<b>15</b>

Table 8 shows that 15 B.Sc. Bioresource Engineering bursary holders at UKZN secured placement for vacation work with different companies through facilitation by the technical tutor. The table further



shows that the highest number of bursary holders who received vacation work placement were third year students with seven, followed by second year with four and fourth year students with three. The table further shows that only one first year bursary holder received vacation work.

## 4. PERFORMANCE OF BURSARY HOLDERS FOR 2012

### 4.1 Analysis of performance of all bursary holders

The academic performance of bursary holders is analysed in order to measure the return on investment as well as the overall success of the scheme. The performance of bursary holders is analysed on the basis of individual student's results as received from the academic institutions. A report indicating whether a learner qualifies (passed) or does not qualify (failed) to proceed to the next level of study is used as a measurement for the learner's performance.

**TABLE 9: Breakdown of performance of all 2012 bursary holders per fields of study [n = 249]**

Field of study	No. passed	No. failed	Total
B.V.Sc.	21	5	26
B.Sc. Viticulture and Oenology	6	0	6
B. Agric. Viticulture	5	4	9
B.Sc. Bioresource Engineering	22	3	25
B.Sc. Agric. Economics	10	2	12
B.Com. Agric. Business Management	1	0	1
B.Sc. Food Science	8	1	9
B.Sc. Genetics	6	0	6
B.Sc. Plant Pathology	2	0	2
B.Sc. Agric. Entomology	1	0	1
B.Sc. Soil Science	6	0	6
B.Sc. Agronomy	4	0	4
B.Sc. Pasture Science	7	0	7
B.Sc. Forestry Science	9	1	10
B.Sc. Forestry and Wood Science	1	0	1
B.Sc. Marine Biology	2	0	2
B.Sc. Ichthyology, specialising in Aquaculture	1	0	1
B.Sc. Oceanography and Marine Biology	2	0	2
Nat. Dipl. Forestry	4	0	4
Nat. Dipl. Food Technology	9	2	11
Nat. Dipl. Oceanography	4	0	4
Diploma in Agriculture	37	0	37
National Senior Certificate	13	0	13
Post graduate Diploma in Higher Education	1	0	1
B.Tech. Oceanography	1	0	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	1
B.Sc. Microbiology (Hons)	1	0	1
B.Sc. Zoology (Hons)	1	0	1
B.Com. Agric. Economics (Hons)	1	0	1
M.Tech. Animal Production	3	0	3
M.Tech. Agriculture	1	0	1
M.Tech. Forestry	1	0	1
M.Sc. Pasture Science	1	0	1
M.Sc. Animal Production	1	0	1
M.Sc. Aquaculture	1	0	1
M.Sc. Veterinary Microbiology	1	0	1
M.Sc. Food Science	2	0	2
M.Sc. Agronomy	2	0	2
M.Sc. Soil Science	2	0	2

**TABLE 9: Breakdown of performance of all 2012 bursary holders per fields of study [n = 249] (cont.)**

Field of study	No. passed	No. failed	Total
M.Sc. Entomology	1	0	1
M.Sc. Environmental Management	1	0	1
M.Sc. Forestry Science	2	0	2
M.Sc. Forestry and Resource Management	1	0	1
M.Sc. Wood Science	1	0	1
M.Sc. Molecular and Cell Biology	1	0	1
M.Sc. Aquatic Breeding (international)	1	0	1
M.Sc. Agronomy (international)	6	0	6
M.Sc. Animal Science (international)	2	0	2
M.Sc. Crop Cultivation (international)	1	0	1
M.Sc. Plant Quarantine (international)	1	0	1
M.Sc. Rural Development (international)	1	0	1
M.Sc. Zoology (international)	1	0	1
M.Sc. Agric. Economics (international)	4	0	4
Ph.D. Agronomy (international)	2	0	2
Ph.D. Rural Development (international)	1	0	1
Ph.D. Forestry Science	1	0	1
Ph.D. Animal Production	1	0	1
<b>Total</b>	<b>231</b>	<b>18</b>	<b>249</b>

Table 9 indicates that out of 254 bursary holders for 2012, 249 wrote their end-of-year examinations. Of this total, 231 passed their end-of-year/mid-of-year examinations, while 18 failed.

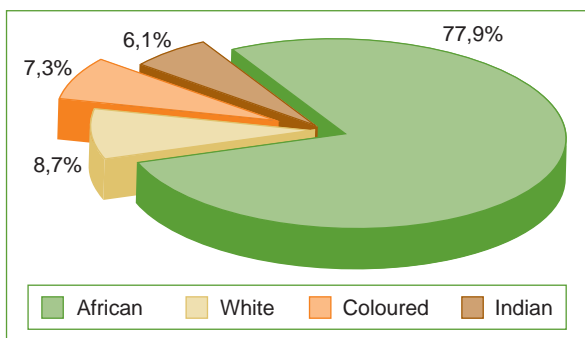
**TABLE 10: Analysis of bursary holders who passed their 2012 end-of-year examinations per race and gender [n = 231]**

Field of study	Race				Gender				Total
	African	Coloured	Indian	White	Male		Female		
	No.	No.	No.	No.	No.	%	No.	%	No.
B.V.Sc.	6	3	10	2	4	19,0	17	81,0	21
B.Sc. Viticulture and Oenology	6	0	0	0	2	33,3	4	66,7	6
B. Agric. Viticulture	1	1	1	2	3	60,0	2	40,0	5
B.Sc. Bioresource Engineering	18	0	2	2	11	50,0	11	50,0	22
B.Sc. Agric. Economics	9	1	0	0	4	40,0	6	60,0	10
B.Com. Agric. Business Management	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Food Science	8	0	0	0	1	12,5	7	87,5	8
B.Sc. Genetics	6	0	0	0	4	66,7	2	33,3	6
B.Sc. Plant Pathology	1	0	1	0	0	0,0	2	100,0	2
B.Sc. Entomology	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Soil Science	6	0	0	0	3	50,0	3	50,0	6
B.Sc. Agronomy	3	0	0	1	1	25,0	3	75,0	4
B.Sc. Pasture Science	7	0	0	0	2	28,6	5	71,4	7
B.Sc. Forestry Science	4	0	0	5	5	55,6	4	44,4	9
B.Sc. Forestry and Wood Science	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Ichthyology, specialising in Aquaculture	0	0	0	1	1	100,0	0	0,0	1
B.Sc. Marine Biology	1	1	0	0	1	50,0	1	50,0	2
B.Sc. Oceanography and Marine Biology	1	1	0	0	1	50,0	1	50,0	2
Nat. Dipl. Forestry	4	0	0	0	1	25,0	3	75,0	4
Nat. Dipl. Food Technology	9	0	0	0	4	44,4	5	55,6	9

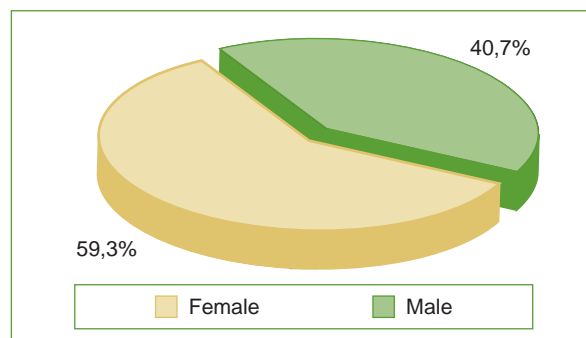
**TABLE 10: Analysis of bursary holders who passed their 2012 end-of-year examinations per race and gender [n = 231] (cont.)**

Field of study	Race				Gender				Total
	African	Coloured	Indian	White	Male		Female		
	No.	No.	No.	No.	No.	%	No.	%	No.
Nat. Dipl. Oceanography	2	2	0	0	1	25,0	3	75,0	4
Diploma in Agriculture	31	6	0	0	17	45,9	20	54,1	37
National Senior Certificate	10	1	0	2	3	23,1	10	76,9	13
Postgraduate Diploma in Higher Education	1	0	0	0	1	100,0	0	0,0	1
B. Tech. Oceanography	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Microbiology (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Zoology (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Com. Agric. Economics (Hons)	1	0	0	0	0	0,0	1	100,0	1
M. Tech. Animal Production	3	0	0	0	1	33,3	2	66,7	3
M. Tech. Agriculture	1	0	0	0	1	100,0	0	0,0	1
M. Tech. Forestry	0	0	0	1	1	100,0	0	0,0	1
M.Sc. Pasture Science	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Animal Production	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Aquaculture	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Veterinary Microbiology	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Food Science	2	0	0	0	0	0,0	2	100,0	2
M.Sc. Agronomy	2	0	0	0	0	0,0	2	100,0	2
M.Sc. Soil Science	2	0	0	0	1	50,0	1	50,0	2
M.Sc. Entomology	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Environmental Management	1	0	0	0	1	100,0	0	0,0	1
M.Sc. Forestry Science	0	0	0	2	2	100,0	0	0,0	2
M.Sc. Forestry and Resource Management	0	1	0	0	1	100,0	0	0,0	1
M.Sc. Wood Science	0	0	0	1	1	100,0	0	0,0	1
M.Sc. Molecular and Cell Biology	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Aquatic Breeding (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Agronomy (international)	6	0	0	0	6	100,0	0	0,0	6
M.Sc. Animal Science (international)	2	0	0	0	2	100,0	0	0,0	2
M.Sc. Crop Cultivation (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Plant Quarantine (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Rural Development (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Zoology (international)	1	0	0	0	0	0,0	1	100,0	1
M.Sc. Agric. Economics (international)	4	0	0	0	1	25,0	3	75,0	4
Ph.D. Agronomy (international)	2	0	0	0	1	50,0	1	50,0	2
Ph.D. Rural Development (international)	1	0	0	0	0	0,0	1	100,0	1
Ph.D. Forestry Science	0	0	0	1	0	0,0	1	100,0	1
Ph.D. Animal Production	1	0	0	0	1	100,0	0	0,0	1
<b>Total</b>	<b>180</b>	<b>17</b>	<b>14</b>	<b>20</b>	<b>94</b>	<b>40,7</b>	<b>137</b>	<b>59,3</b>	<b>231</b>

Table 10 provides the racial breakdown of bursary beneficiaries who passed their 2012 end-of-year examinations per field of study. The data reflected on the table indicate that 180 Africans, 17 coloureds, 14 Indians, and 20 whites passed their final examinations. The table further shows that in total, 231 bursary beneficiaries passed their final examinations of which 137 are females and 94 are males.



**GRAPH 3:** Breakdown of all bursary holders who passed their 2012 end-of-year examinations in terms of race [ $n = 231$ ]



**GRAPH 4:** Breakdown of all bursary holders who passed their 2012 end-of-year examinations in terms of gender [ $n = 231$ ]

In terms of race, Graph 3 above left shows that 77,9% of the beneficiaries who passed were Africans. The other racial groups make up the remaining 22,1%.

The gender graph, above right, demonstrates that 59,3% of the beneficiaries who passed are females and 40,7% are males.

**TABLE 11:** Analysis of bursary holders who failed their 2012 end-of-year examinations in terms of race and gender [ $n = 18$ ]

Field of study	Race				Gender				Total
	African	Coloured	Indian	White	Male		Female		
	No.	No.	No.	No.	No.	%	No.	%	
B.V.Sc.	4	1	0	0	0	0,0	5	100,0	5
B.Sc. Bioresource Engineering	3	0	0	0	1	33,3	2	66,7	3
B. Agric. Viticulture	2	2	0	0	2	50,0	2	50,0	4
B.Sc. Agric. Economics	2	0	0	0	1	50,0	1	50,0	2
B.Sc. Food Science	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Forestry Science	1	0	0	0	1	100,0	0	0,0	1
Nat. Dipl. Food Technology	2	0	0	0	2	100,0	0	0,0	2
<b>Total</b>	<b>15</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>52,6</b>	<b>10</b>	<b>47,4</b>	<b>18</b>

Table 11 shows that 18 bursary beneficiaries failed their end-of-year examinations. Of these, 15 are Africans and three are coloureds. The highest failure rate was recorded in B.V.Sc. with five, followed by B. Agric. Viticulture with four and then by B.Sc. Bioresource Engineering with three.

**TABLE 12:** Analysis of the 2012 performance of all bursary holders per institution of higher learning [ $n = 249$ ]

Institutions	No. passed	No. failed	Total
University of Pretoria	31	5	36
University of Stellenbosch	27	2	29
University of KwaZulu-Natal	30	6	36
University of Free State	10	0	10
University of Fort Hare	11	0	11
University of Limpopo	6	0	6
University of Zululand	2	0	2
University of Venda	2	0	2
University of Witwatersrand	4	0	4
University of Johannesburg	1	0	1
University of Western Cape	3	0	3

**TABLE 12: Analysis of the 2012 performance of all bursary holders per institution of higher learning [ $n = 249$ ] (cont.)**

Institutions	No. passed	No. failed	Total
University of Cape Town	2	0	2
University of South Africa	2	0	2
Rhodes University	2	0	2
China Agricultural University	16	0	16
Jiling Agriculture University	3	0	3
Nanjing University	1	0	1
Nelson Mandela Metropolitan University	5	0	5
Tshwane University of Technology	7	1	8
Cape Peninsula University of Technology	11	0	11
Elsenburg College	5	4	9
Grootfontein Agricultural Development Institute	37	0	37
Alexandra High School	2	0	2
Phandulwazi Agricultural High School	1	0	1
Oakdale Agricultural High School	2	0	2
Unicom Agricultural High School	2	0	2
Kuschke Agricultural High School	2	0	2
Morgenzon Landbou Akademie	1	0	1
Heritage Academy	1	0	1
Marion High School	2	0	2
<b>Total</b>	<b>231</b>	<b>18</b>	<b>249</b>

Table 12 shows that 231 bursary holders passed their end-of-year examinations and 18 failed. The highest failure rate was recorded at the University of KwaZulu-Natal with six, followed by the University of Pretoria with five, followed by Elsenburg College and the University of Stellenbosch with four and two, respectively.

#### 4.2 Analysis of discontinuation of studies for 2012 bursary holders

Despite the comprehensive academic support given to bursary holders in 2012, 6 students discontinued their studies as shown in the table below.

**TABLE 13: Analysis of exclusion and discontinuation of studies by bursary holders for the 2012 academic year [ $n = 6$ ]**

Field of study	No. terminated owing to ill-health	No. terminated owing to poor academic performance	No. terminated owing to misconduct	Total
B.Sc. Bioresource Engineering	0	2	0	2
B.Sc. Forestry	0	1	0	1
B.Sc. Genetics	1	0	0	1
B.Sc. Plant Pathology	0	0	1	1
B.Sc. Animal Breeding (Hons)	0	1	0	1
<b>Total</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>6</b>

Table 13 shows that two B.Sc. Bioresource Engineering bursary holders at the University of KwaZulu-Natal, one in B.Sc. Forestry Science at the University of Stellenbosch and one in B.Sc. (Hons) Animal Breeding at the University of Free State terminated their studies in the first semester owing to personal challenges that made them unable to cope with their studies. One B.Sc. Genetics student at the University of Free State discontinued studies owing to critical health problems. The table further shows that one B.Sc. Plant Pathology student at the University of Free State's bursary contract was terminated by the department owing to serious misconduct.

## 5. ANALYSIS OF BURSARY HOLDERS WHO COMPLETED THEIR STUDIES AT TERTIARY LEVEL IN 2012

The major success indicator of the External Bursary Scheme is the number of bursary holders who successfully complete their studies and secure relevant employment. During the 2012 academic year, 60 bursary holders successfully completed their studies. The analysis of those who completed is given below.

**TABLE 14:** Analysis of bursary holders who completed their studies per field of study, race and gender in 2012 [ $n = 60$ ]

Field of study	Race				Gender				Total
	African	Coloured	Indian	White	Male		Female		
	No.				No.	%	No.	%	
B.V.Sc.	0	1	6	0	1	14,3	6	85,7	7
B.Sc. Bioresource Engineering	1	0	1	1	2	66,7	1	33,3	3
B.Sc. Agricultural Economics	4	1	0	0	2	40,0	3	60,0	5
B. Agric. Viticulture	0	0	1	0	1	100,0	0	0,0	1
B.Sc. Oceanography and Marine Biology	0	0	0	1	0	0,0	1	100,0	1
B.Sc. Food Science	4	0	0	0	0	0,0	4	100,0	4
B.Sc. Pasture Science	2	0	0	0	0	0,0	2	100,0	2
B.Sc. Agronomy	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Forestry	0	0	0	3	2	66,7	1	33,3	3
B.Sc. Agric. Entomology	1	0	0	0	0	0,0	1	100,0	1
Nat. Dipl. Food Technology	4	0	0	0	1	25,0	3	75,0	4
Diploma in Agriculture	17	5	0	0	14	63,6	8	36,4	22
Postgraduate Diploma in Higher Education	1	0	0	0	1	100,0	0	0,0	1
B.Tech. Oceanography	1	0	0	0	0	0,0	1	100,0	1
B.Sc. Microbiology (Hons)	1	0	0	0	0	0,0	1	100,0	1
B.Com. Agric. Economics (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	0	0	1	100,0	0	0,0	1
B.Sc. Zoology (Hons)	1	0	0	0	0	0,0	1	100,0	1
<b>Total</b>	<b>40</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>26</b>	<b>43,3</b>	<b>34</b>	<b>56,7</b>	<b>60</b>

Table 14 indicates that 60 bursary beneficiaries, consisting of postgraduate and undergraduate students, successfully completed their studies in 2012. In terms of racial breakdown, 40 of the beneficiaries were Africans, seven were coloureds, eight were Indians and five were whites. In terms of gender, 26 males (43,3%) and 34 females (56,7%) completed their studies. The highest number of completion was recorded in the Diploma in Agriculture with 22, followed by B.V.Sc. with seven, followed by B.Sc. Agric. Economics, the Nat. Dipl. in Food Technology with six beneficiaries each.

**TABLE 15:** Analysis of the employment status of bursary holders who completed their studies per field of study, race and gender as at 31/03/2013 [ $n = 60$ ]

Field of study	Race				Gender		Total	Current status			
	African	Coloured	Indian	White	Male	Female		No. employed	No. unemployed	No. furthering studies (post-graduate)	
	No.				No.			No.	Name	No.	
B.V.Sc.	0	1	6	0	1	6	7	6	1	• Cape of Good Hope SPCA	–

**TABLE 15:** Analysis of the employment status of bursary holders who completed their studies per field of study, race and gender as at 31/03/2013 [*n* = 60] (*cont.*)

Field of study	Race				Gender		Total	Current status			
	African	Coloured	Indian	White	Male	Female		No. employed	No. unemployed	Company organisation	No. furthering studies (post-graduate)
B.V.Sc. ( <i>cont.</i> )										<ul style="list-style-type: none"> <li>• Sea Point Veterinary Service</li> <li>• Randfield Veterinary Clinic</li> <li>• Alchapel Veterinary Hospital</li> <li>• Boksburg Animal Hospital</li> <li>• Vanderbijlpark Veterinary Clinic</li> </ul>	–
B.Sc. Bioresource Engineering	1	0	1	1	2	1	3	2	0	• DAFF (2)	1
B.Sc. Agricultural Economics	4	1	0	0	2	3	5	5	0	• DAFF Internship Programme	–
B Agric. Viticulture	0	0	1	0	1	0	1	1	0	• DAFF Internship Programme	–
B.Sc. Oceanography and Marine Biology	0	0	0	1	0	1	1	0	0	• Wine Makers Guild	1
B.Sc. Food Science	4	0	0	0	0	4	4	0	0	• Further studies	4
B.Sc. Pasture Science	2	0	0	0	0	2	2	2	0	• DAFF Internship Programme	–
B.Sc. Agronomy	1	0	0	0	0	1	1	1	0	• DAFF Internship Programme	–
B.Sc. Forestry	0	0	0	3	2	1	3	2	0	<ul style="list-style-type: none"> <li>• University of Stellenbosch (1)</li> <li>• Mondi Forestry (1)</li> <li>• DAFF Internship Programme</li> </ul>	1
B.Sc. Agric. Entomology	1	0	0	0	0	1	1	0	0	–	1
Nat.Dipl. Food Technology	4	0	0	0	1	3	4	4	0	<ul style="list-style-type: none"> <li>• DAFF Internship Programme (3)</li> <li>• Coca Cola (1)</li> </ul>	–
Diploma in Agriculture	17	5	0	0	14	8	22	2	20	• DAFF Internship Programme (2)	–
Postgraduate Diploma in Higher Education	1	0	0	0	1	0	1	0	0	• DAFF	1
B.Tech. Oceanography	1	0	0	0	0	1	1	0	0	–	1
B.Sc. Microbiology (Hons)	1	0	0	0	0	1	1	0	0	–	1

**TABLE 15:** Analysis of the employment status of bursary holders who completed their studies per field of study, race and gender as at 31/03/2013 [*n* = 60] (*cont.*)

Field of study	Race				Gender		Total	Current status			
	African	Coloured	Indian	White	Male	Female		No. employed	No. unemployed	Company organisation	No. furthering studies (post-graduate)
B.Com. Agric. Economics (Hons)	1	0	0	0	1	0	1	0	0	–	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	0	0	1	0	1	0	0	–	1
B.Sc. Zoology (Hons)	1	0	0	0	0	1	1	0	0	–	1
<b>Total</b>	<b>40</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>26</b>	<b>34</b>	<b>60</b>	<b>25</b>	<b>21</b>	<b>–</b>	<b>16</b>

Table 15 indicates the employment status of sixty (60) 2012 bursary holders who completed their studies as at 31 March 2013. The table shows that 25 out of 60 bursary holders who completed their studies at the end of the 2012 academic year secured employment, 21 could not secure employment while 14 furthered their studies (postgraduate).

## 6. ANALYSIS OF LEVEL OF STUDY OF THE 2012 BURSARY HOLDERS

The following table shows the analysis of level of study of bursary holders against the total duration of the course.

**TABLE 16:** Analysis of the level of study of the 2012 bursary holders [*n* = 254]

Field of study	Year of study							Total	Total duration
	1	2	3	4	5	6	Total		
B.V.Sc.	5	6	0	2	6	7	26	6	
B.Sc. Viticulture and Oenology	2	2	2	0	0	0	6	4	
B.Agric. Viticulture	5	3	1	0	0	0	9	3	
B.Sc. Bioresource Engineering	12	5	4	6	0	0	27	4	
B.Sc. Agric. Economics	0	1	0	11	0	0	12	4	
B.Com. Agric. Business Management	0	0	0	1	0	0	1	4	
B.Sc. Food Science	1	2	1	5	0	0	9	4	
B.Sc. Genetics	5	1	1	0	0	0	7	4	
B.Sc. Plant Pathology	0	1	1	0	0	0	2	4	
B.Sc. Entomology	0	0	0	1	0	0	1	4	
B.Sc. Soil Science	0	0	6	0	0	0	6	4	
B.Sc. Agronomy	1	1	1	1	0	0	4	4	
B.Sc. Pasture Science	0	2	3	2	0	0	7	4	
B.Sc. Ichthyology, specialising in Aquaculture	0	1	0	0	0	0	1	4	
B.Sc. Forestry Science	0	2	2	7	0	0	11	4	
B.Sc. Forestry and Wood Science	1	0	0	0	0	0	1	4	
B.Sc. Marine Biology	1	1	0	0	0	0	2	4	
B.Sc. Oceanography and Marine Biology	1	0	1	0	0	0	2	4	
Nat. Dipl. Forestry	1	3	0	0	0	0	4	3	



**TABLE 16: Analysis of the level of study of the 2012 bursary holders [n = 254] (cont.)**

Field of study	Year of study							Total duration
	1	2	3	4	5	6	Total	
Nat. Dipl. Food Technology	2	3	6	0	0	0	11	3
Nat. Dipl. Oceanography	0	4	0	0	0	0	4	3
Diploma in Agriculture	5	10	22	0	0	0	37	3
National Senior Certificate	1	12	0	0	0	0	13	1
Postgraduate Diploma in Higher Education	1	0	0	0	0	0	1	1
B.Tech. Oceanography	1	0	0	0	0	0	1	1
B.Sc. Biodiversity and Conservation (Hons)	1	0	0	0	0	0	1	1
B.Sc. Animal Breeding (Hons)	1	0	0	0	0	0	1	2
B.Sc. Microbiology (Hons)	1	0	0	0	0	0	1	1
B.Sc. Zoology (Hons)	1	0	0	0	0	0	1	1
B.Com. Agric. Economics (Hons)	1	0	0	0	0	0	1	1
M.Tech. Animal Production	3	0	0	0	0	0	3	2
M.Tech. Agriculture	0	1	0	0	0	0	1	2
M.Tech. Forestry	1	0	0	0	0	0	1	2
M.Sc. Pasture Science	1	0	0	0	0	0	1	2
M.Sc. Animal Production	0	1	0	0	0	0	1	2
M.Sc. Aquaculture	1	0	0	0	0	0	1	2
M.Sc. Veterinary Microbiology Biology	1	0	0	0	0	0	1	2
M.Sc. Food Science	1	1	0	0	0	0	2	2
M.Sc. Agronomy	1	0	0	0	0	0	1	2
M.Sc. Soil Science	2	1	0	0	0	0	3	2
M.Sc. Entomology	1	0	0	0	0	0	1	2
M. Sc. Environmental Management	1	0	0	0	0	0	1	1
M.Sc. Forestry Science	1	1	0	0	0	0	2	2
M.Sc. Forestry and Resource Management	1	0	0	0	0	0	1	2
M.Sc. Wood Product Science	0	1	0	0	0	0	1	2
M.Sc. Molecular and Cell Biology	1	0	0	0	0	0	1	2
M.Sc. Aquatic Breeding (international)	0	1	0	0	0	0	1	2
M.Sc. Agronomy (international)	1	5	0	0	0	0	6	2
M.Sc. Animal Science (international)	2	0	0	0	0	0	2	2
M.Sc. Crop Cultivation (international)	1	0	0	0	0	0	1	2
M.Sc. Plant Quarantine (international)	1	0	0	0	0	0	1	2
M.Sc. Rural Development (international)	1	0	0	0	0	0	1	2
M.Sc. Zoology (international)	1	0	0	0	0	0	1	2
M.Sc. Agric. Economics (international)	0	4	0	0	0	0	4	2
Ph.D. Agronomy (international)	0	2	0	0	0	0	2	3
Ph.D. Rural Development (international)	1	0	0	0	0	0	1	3
Ph.D. Forestry Science	1	0	0	0	0	0	1	3
Ph.D. Animal Production	0	1	0	0	0	0	1	3
<b>Total</b>	<b>75</b>	<b>79</b>	<b>51</b>	<b>36</b>	<b>6</b>	<b>7</b>	<b>254</b>	

Table 16 shows that 75 bursary beneficiaries were registered at first-year level, 79 at second-year level, 51 at third-year level and 36 at fourth-year level. The table further shows that six beneficiaries were registered in fifth level and seven beneficiaries at sixth-year (final year) of B.V.Sc.

## 7. REVENUE AND EXPENDITURE FOR 2012

For the 2012 academic year, the scheme received a budget of R15,7 million, which was administered as follows:

- R12 500 000: transferred to NSFAS for bursary holders at universities and universities of technology within South Africa;
- R1 462 317,82: transferred to DIRCO for bursary holders at universities in China; and
- R1 770 376,88: administered by the Directorate: Financial Accounting (DAFF) for bursary holders in high schools and colleges of agriculture (South Africa).

The tables below show the analysis of expenditure incurred for implementation of the scheme during the 2012 academic year.

**TABLE 17: Analysis of expenditure according to fields of study registered by all bursary holders for 2012 [n = 254]**

Field of study	African	Coloured	Indian	White	Total
	Amount (R)				
B.V.Sc.	820 634,60	335 565,30	885 888,00	152 333,00	2 194 420,90
B.Sc. Viticulture and Oenology	509 674,00	0,00	0,00	0,00	509 674,00
B. Agric. Viticulture	143 034,00	141 563,00	0,00	74 983,00	359 580,00
B.Sc. Bioresource Engineering	1 490 179,00	0,00	136 652,00	142 278,00	1 769 109,00
B.Sc. Agric. Economics	581 462,00	76 611,00	0,00	0,00	658 073,00
B.Com. Agric. Business Management	72 962,00	0,00	0,00	0,00	72 962,00
B.Sc. Food Science	652 040,56	0,00	0,00	0,00	652 040,56
B.Sc. Genetics	467 083,79	0,00	0,00	0,00	467 083,79
B.Sc. Plant Pathology	99 311,57	0,00	45 270,00	0,00	144 581,57
B.Sc. Entomology	69 306,16	0,00	0,00	0,00	69 306,16
B.Sc. Soil Science	383 617,47	0,00	0,00	0,00	383 617,47
B.Sc. Agronomy	154 207,00	0,00	0,00	87 772,00	241 979,00
B.Sc. Pasture Science	381 044,00	0,00	0,00	0,00	381 044,00
B.Sc. Forestry Science	442 275,00	0,00	0,00	324 414,00	766 689,00
B.Sc. Forestry and Wood Science	80 492,00	0,00	0,00	0,00	80 492,00
B.Sc. Ichthyology, specialising in Aquaculture	83 300,00	0,00	0,00	83 540,00	166 840,00
B.Sc. Marine Biology	0,00	64 720,00	0,00	0,00	64 720,00
B.Sc. Oceanography and Marine Biology	90 720,00	0,00	0,00	94 320,00	185 040,00
Nat. Dipl. Forestry	100 680,00	0,00	0,00	0,00	100 680,00
Nat. Dipl. Food Technology	330 472,06	0,00	0,00	0,00	330 472,06
Nat. Dipl. Oceanography	112 065,00	93 945,92	0,00	0,00	206 010,92
Diploma in Agriculture	1 085 451,00	140 745,88	0,00	0,00	1 226 196,88
National Senior Certificate	139 600,00	15 000,00	0,00	30 000,00	184 600,00
Postgraduate Diploma in Higher Education	20 140,00	0,00	0,00	0,00	20 140,00
B.Tech. Oceanography	18 149,99	0,00	0,00	0,00	18 149,99
B.Sc. Biodiversity and Conservation (Hons)	25 720,00	0,00	0,00	0,00	25 720,00
B.Sc. Animal Breeding (Hons)	28 796,00	0,00	0,00	0,00	28 796,00
B.Sc. Microbiology (Hons)	35 882,00	0,00	0,00	0,00	35 882,00
B.Sc. Zoology (Hons)	21 594,00	0,00	0,00	0,00	21 594,00
B.Com. Agric. Economics (Hons)	40 812,00	0,00	0,00	0,00	40 812,00
M.Tech. Animal Production	42 033,52	0,00	0,00	0,00	42 033,52

**TABLE 17: Analysis of expenditure according to fields of study registered by all bursary holders for 2012 [*n* = 254] (cont.)**

Field of study	African	Coloured	Indian	White	Total
	Amount (R)				
M.Tech. Agriculture	888,88	0,00	0,00	0,00	888,88
M.Tech. Forestry	0,00	0,00	0,00	12 820,00	12 820,00
M.Sc. Pasture Science	29 252,00	0,00	0,00	0,00	29 252,00
M.Sc. Animal Science	11 140,00	0,00	0,00	0,00	11 140,00
M.Sc. Aquaculture	17 144,00	0,00	0,00	0,00	17 144,00
M.Sc. Veterinary Microbiology	21 460,00	0,00	0,00	0,00	21 460,00
M.Sc. Food Science	74 142,00	0,00	0,00	0,00	74 142,00
M.Sc. Agronomy	19 544,00	0,00	0,00	0,00	19 544,00
M.Sc. Soil Science	5 460,00	0,00	0,00	0,00	5 460,00
M.Sc. Entomology	2 400,00	0,00	0,00	0,00	2 400,00
M.Sc. Environmental Management	2 890,00	0,00	0,00	0,00	2 890,00
M.Sc. Forestry Science	0,00	0,00	0,00	51 371,00	51 371,00
M.Sc. Forest and Resource Management	0,00	22 060,00	0,00	0,00	22 060,00
M.Sc. Wood Science	0,00	0,00	0,00	24 925,00	24 925,00
M.Sc. Molecular and Cell Biology	17 109,00	0,00	0,00	0,00	17 109,00
M.Sc. Aquatic Breeding (international)	33 033,02	0,00	0,00	0,00	33 033,02
M.Sc. Agronomy (international)	493 190,02	0,00	0,00	0,00	493 190,02
M.Sc. Animal Science (international)	66 066,04	0,00	0,00	0,00	66 066,04
M.Sc. Crop Cultivation (international)	33 033,02	0,00	0,00	0,00	33 033,02
M.Sc. Plant Quarantine (international)	92 927,18	0,00	0,00	0,00	92 927,18
M.Sc. Rural Development (international)	92 927,18	0,00	0,00	0,00	92 927,18
M.Sc. Zoology (international)	34 274,14	0,00	0,00	0,00	34 274,14
M.Sc. Agric. Economics (international)	368 125,60	0,00	0,00	0,00	368 125,60
Ph.D. Agronomy (international)	214 467,48	0,00	0,00	0,00	214 467,48
Ph.D. Rural Development (international)	34 274,14	0,00	0,00	0,00	34 274,14
Ph.D. Forestry Science	0,00	0,00	0,00	16 920,00	16 920,00
Ph.D. Animal Production	2 400,00	0,00	0,00	0,00	2 400,00
<b>Total</b>	<b>10 188 886,42</b>	<b>890 211,10</b>	<b>1 067 810,00</b>	<b>1 095 676,00</b>	<b>13 242 583,52</b>

Table 17 shows that R13 242 583,52 was spent on the 2012 bursary beneficiaries. The highest expenditure of R2 194 420,90 was recorded for B.V.Sc.

**TABLE 18: Analysis of the 2012 expenditure for all bursary holders according to gender [*n* = 254]**

Field of study	Male	Female	Total
	Amount (R)		
B.V.Sc.	325 927,00	1 868 493,90	2 194 420,90
B.Sc. Viticulture and Oenology	169 947,00	339 727,00	509 674,00
B. Agric. Viticulture	200 051,00	159 529,00	359 580,00
B.Sc. Bioresource Engineering	941 600,00	827 509,00	1 769 109,00
B.Sc. Agric. Economics	346 739,00	311 334,00	658 073,00
B.Com. Agric. Business Management	0,00	72 962,00	72 962,00
B.Sc. Food Science	119 830,00	532 210,56	652 040,56

**TABLE 18: Analysis of the 2012 expenditure for all bursary holders according to gender [n = 254] (cont.)**

Field of study	Male	Female	Total
	Amount (R)		
B.Sc. Genetics	320 679,49	146 404,30	467 083,79
B.Sc. Plant Pathology	0,00	144 581,57	144 581,57
B.Sc. Entomology	0,00	69 306,16	69 306,16
B.Sc. Soil Science	166 571,00	217 046,47	383 617,47
B.Sc. Agronomy	55 160,00	186 819,00	241 979,00
B.Sc. Pasture Science	106 854,00	274 190,00	381 044,00
B.Sc. Forestry Science	532 442,00	234 247,00	766 689,00
B.Sc. Forestry and Wood Science	0,00	80 492,00	80 492,00
B.Sc. Ichthyology, specialising in Aquaculture	83 540,00	0,00	83 540,00
B.Sc. Marine Biology	83 300,00	64 720,00	148 020,00
B.Sc. Oceanography and Marine Biology	90 720,00	94 320,00	185 040,00
Nat. Dipl. Forestry	12 820,00	87 860,00	100 680,00
Nat. Dipl. Food Technology	152 889,06	177 583,00	330 472,06
Nat. Dipl. Oceanography	55 255,00	150 755,92	206 010,92
Diploma in Agriculture	601 008,00	625 188,88	1 226 196,88
National Senior Certificate	45 000,00	139 600,00	184 600,00
Postgraduate Diploma in Higher Education	20 140,00	0,00	20 140,00
B.Tech. Oceanography	0,00	18 149,99	18 149,99
B.Sc. Biodiversity and Conservation (Hons)	0,00	25 720,00	25 720,00
B.Sc. Animal Breeding (Hons)	28 796,00	0,00	28 796,00
B.Sc. Microbiology (Hons)	35 882,00	0,00	35 882,00
B.Sc. Zoology (Hons)	0,00	21 594,00	21 594,00
B.Com. Agric. Economics (Hons)	0,00	40 812,00	40 812,00
M.Tech. Animal Production	13 534,33	28 499,19	42 033,52
M.Tech. Agriculture	888,88	0,00	888,88
M.Tech. Forestry	12 820,00	0,00	12 820,00
M.Sc. Pasture Science	29 252,00	0,00	29 252,00
M.Sc. Animal Production	11 140,00	0,00	11 140,00
M.Sc. Aquaculture	0,00	17 144,00	17 144,00
M.Sc. Veterinary Microbiology	21 460,00	0,00	21 460,00
M.Sc. Food Science	74 142,00	0,00	74 142,00
M.Sc. Agronomy	0,00	19 544,00	19 544,00
M.Sc. Soil Science	1 820,00	3 640,00	5 460,00
M.Sc. Entomology	0,00	2 400,00	2 400,00
M.Sc. Environmental Management	2 890,00	0,00	2 890,00
M.Sc. Forestry Science	51 371,00	0,00	51 371,00
M.Sc. Forest and Resource Management	22 060,00	0,00	22 060,00
M.Sc. Wood Science	24 925,00	0,00	24 925,00
M.Sc. Molecular and Cell Biology	0,00	17 109,00	17 109,00
M.Sc. Aquatic Breeding (international)	0,00	33 033,02	33 033,02
M.Sc. Agronomy (international)	493 190,02	0,00	493 190,02
M.Sc. Animal Science (international)	66 066,04	0,00	66 066,04
M.Sc. Crop Cultivation (international)	0,00	33 033,02	33 033,02
M.Sc. Plant Quarantine (international)	0,00	92 927,18	92 927,18
M.Sc. Rural Development (international)	0,00	92 927,18	92 927,18
M.Sc. Zoology (international)	0,00	34 274,14	34 274,14
M.Sc. Agric. Economics (international)	276 094,20	92 031,40	368 125,60

**TABLE 18: Analysis of the 2012 expenditure for all bursary holders according to gender [n = 254] (cont.)**

Field of study	Male	Female	Total
	Amount (R)		
Ph.D. Agronomy (international)	107 233,74	107 233,74	214 467,48
Ph.D. Rural Development (international)	0,00	34 274,14	34 274,14
Ph.D. Forestry Science	0,00	16 920,00	16 920,00
Ph.D. Animal Production	2 400,00	0,00	2 400,00
<b>Total</b>	<b>5 706 437,76</b>	<b>7 536 145,76</b>	<b>13 242 583,52</b>

Table 18 shows that the bursary expenditure was R5 706 437,76 for male beneficiaries and R7 536 145,76 for females beneficiaries.

**TABLE 19: Breakdown of the 2012 expenditure for all bursary holders according to the institutions [n = 254]**

Institution	No. of awards	Amount spent (R)
University of Pretoria	36	2 655 184,86
University of Stellenbosch	30	1 941 551,00
University of KwaZulu-Natal	37	2 312 069,00
University of Free State	13	735 211,59
University of Fort Hare	11	573 710,00
University of Johannesburg	1	36 645,00
University of Limpopo	6	162 021,00
University of Cape Town	2	185 040,00
University of South Africa	2	23 030,00
Rhodes University	2	166 840,00
University of the Western Cape	3	112 500,00
University of Witwatersrand	4	270 049,00
University of Venda	2	62 330,00
University of Zululand	2	99 047,00
China Agricultural University	16	1 328 944,62
Jiling Agricultural University	3	100 340,18
Nanjing University	1	33 033,02
Cape Peninsula University of Technology	11	413 269,97
Tshwane University of Technology	8	147 890,40
Nelson Mandela Metropolitan University	5	113 500,00
Elsenburg College of Agriculture	9	359 580,00
Grootfontein Agricultural Development Institute	37	1 226 196,88
Alexandra High School	2	21 400,00
Phandulwazi Agricultural High School	1	15 000,00
Oakdale Agricultural High School	2	30 000,00
Unicom Agricultural High School	2	30 000,00
Kuschke Agricultural High School	2	29 940,00
Morgenzon Landbou Akademie	1	15 000,00
Heritage Academy	1	15 000,00
Marion High School	2	28 260,00
<b>Total</b>	<b>254</b>	<b>13 242 583,52</b>

Table 19 above shows that the total expenditure incurred at various institutions was R13 242 583,52. The highest expenditure recorded was R2 655 184,86 at the University of Pretoria, followed by R2 312 069,00 at the University of KwaZulu-Natal and R1 941 551,00 at the University of Stellenbosch.

## 8. SUMMARY OF THE BENEFICIARIES OF THE EXTERNAL BURSARY SCHEME FROM 2004 TO 2012

The tracking of all bursary beneficiaries who participated and benefited from the External Bursary Scheme is of critical importance for measuring the success of the scheme. A database of all the bursary holders who completed their studies has been developed and it is updated annually during the month of April. The table below gives an analysis of bursary holders who benefited from the scheme from its inception in 2004 up to 2012.

**TABLE 20: Summary of beneficiaries of the External Bursary Scheme from 2004 to 2012 [n =1091]**

Field of study	Year									Total	Total completed tertiary qualification
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13		
B.V.Sc.	18	16	7	6	6	9	4	10	10	86	37
B.Sc. Bioresource Engineering	4	8	9	8	8	5	6	10	12	70	19
B.Sc. Agric. Economics	0	10	7	3	19	10	0	1	0	50	29
B.Sc. Agronomy	0	0	0	0	0	0	0	4	2	6	2
B.Sc. Aquaculture	0	0	0	0	0	0	0	1	0	1	0
B.Sc. Biotechnology	0	0	1	6	10	0	0	0	0	17	9
B.Sc. Entomology	0	0	0	0	0	0	0	1	1	2	1
B.Sc. Food Science	0	4	3	3	6	6	3	4	2	31	17
B.Sc. Forestry Science	0	0	3	0	0	0	2	6	0	11	4
B.Sc. Forestry and Wood Science	0	0	0	0	0	0	17	4	1	22	4
B.Sc. Genetics	0	0	0	0	0	1	0	3	5	9	3
B.Sc. Geology Science	0	0	0	0	0	0	1	0	0	1	1
B.Sc. Marine Biology	0	0	0	0	0	0	0	0	2	2	0
B.Sc. Oceanography and Marine Biology	0	0	0	0	0	0	0	0	2	2	1
B.Sc. Plant Pathology	0	0	0	0	0	0	1	2	1	4	0
B.Sc. Pasture Science	0	0	0	0	0	0	0	9	2	11	8
B.Sc. Soil Science	0	0	0	0	0	0	2	4	2	8	0
B.Sc. Wood Science	0	0	0	0	0	0	2	0	0	2	1
B.Sc. Viticulture and Oenology	12	6	7	3	9	1	2	3	2	45	11
B. Agric. Viticulture	10	9	2	1	3	1	2	4	4	36	15
B.Com. Agric. Economics	0	0	0	0	0	0	1	0	0	1	1
Nat. Dipl. Agric. Management	0	0	0	0	0	1	0	0	0	1	0
Nat. Dipl. Food Technology	0	0	0	0	7	8	0	5	2	22	21
Nat. Dipl. Forestry	0	0	0	0	0	0	15	3	3	21	6
Nat. Dipl. Oceanography	0	0	0	0	0	0	0	2	2	4	0
Nat. Dipl. Veterinary Technology	6	0	0	0	0	0	0	0	0	6	3
Diploma in Agriculture	7	4	10	11	10	24	22	11	7	106	90
National Senior Certificate	60	11	45	60	1	0	14	0	6	197	–

**TABLE 20: Summary of beneficiaries of the External Bursary Scheme from 2004 to 2012 [n=1091] (cont.)**

Field of study	Year									Total	Total completed tertiary qualification
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13		
Postgraduate Diploma in Higher Education	0	0	0	0	0	0	0	0	1	1	1
Agri-management Development Programme	0	24	35	24	24	30	0	0	0	137	109
B.Tech. Food Technology	5	6	6	2	2	6	1	1	0	29	11
B.Tech. Agric. Management	0	0	0	0	0	1	0	0	0	1	1
B.Tech. Biotechnology	0	0	0	0	0	0	0	1	0	1	1
B.Tech. Food Consumer Science	5	0	0	0	0	0	1	0	0	6	4
B.Tech. Engineering	0	6	0	0	0	1	0	0	0	7	4
B.Tech. Forestry	0	0	0	0	0	0	3	3	0	6	3
B.Tech. Oceanography	0	0	0	0	0	0	0	0	1	1	1
Honours	0	4	2	2	7	8	0	7	5	35	26
M.Tech. Animal Production	0	0	0	0	0	0	0	2	3	5	0
M.Tech. Agriculture	0	0	0	0	0	0	0	1	0	1	0
M.Tech. Food Technology	0	0	0	0	0	0	0	1	0	1	1
M.Tech. Forestry	0	0	0	0	0	0	0	0	1	1	0
Masters. Domestic	0	13	9	5	5	10	0	7	9	58	32
Masters International Studies	0	0	0	0	0	0	0	10	7	17	0
Ph.D. International Studies	0	0	0	0	0	0	0	2	1	3	0
Ph.D. Domestic	0	2	1	0	0	0	1	3	0	7	1
<b>Total beneficiaries</b>	<b>127</b>	<b>123</b>	<b>174</b>	<b>134</b>	<b>117</b>	<b>122</b>	<b>100</b>	<b>125</b>	<b>96</b>	<b>1 091</b>	<b>–</b>
<b>Total completed tertiary qualification</b>	<b>5</b>	<b>38</b>	<b>80</b>	<b>73</b>	<b>63</b>	<b>62</b>	<b>45</b>	<b>52</b>	<b>60</b>	<b>–</b>	<b>478</b>
<b>Total expenditure (R)</b>	<b>2 912 535,00</b>	<b>4 103 960,00</b>	<b>8 385 715,00</b>	<b>8 919 300,00</b>	<b>1 051 0734,00</b>	<b>1 027 7537,00</b>	<b>1 038 7758,94</b>	<b>1318 1674,57</b>	<b>13 242 583,52</b>	<b>81 861 798,03</b>	

Table 20 indicates that 1 091 bursary holders benefited from the scheme from its inception in 2004 and 478 successfully completed their tertiary qualifications. The table further shows that the highest number of beneficiaries was recorded in the following fields of study: National Senior Certificate (197)—a programme in which learners are recruited with the objective of creating a pool that will follow scarce skills careers in agriculture, forestry and fisheries upon completion of their Grade 12 studies; Agri-management Development Programme (137)—a one-year generic course for entrepreneurial development; Diploma in Agriculture (106); B.Sc. Veterinary Science (86); B.Sc. Bioresource Engineering (70); B.Sc. Agricultural Economics (50); B.Sc. Viticulture and Oenology (45); Masters Domestic (60); Masters International (17), Ph.D. Domestic (7) and Ph.D. International (3). The total amount spent on the implementation of the bursary scheme from 2004 to 2012 is R81 861 798,03. The table further indicates that out of 1 091 bursary beneficiaries, 478 successfully completed their tertiary qualifications.

## 9. SUMMARY OF THE EXTERNAL BURSARIES AWARDED BY PROVINCIAL DEPARTMENTS OF AGRICULTURE DURING THE 2012 ACADEMIC YEAR

### 9.1 Mpumalanga Department of Agriculture, Rural Development and Land Administration

**TABLE 21:** Breakdown of the end-of-year performance of bursary holders sponsored by the Mpumalanga Department of Agriculture, Rural Development and Land Administration in 2012 [*n* = 105]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote exams	No. drop out	No. of awards	No. wrote exams	No. drop out	No. of awards	No. wrote exams	No. drop out	No. of awards	No. wrote exams	No. drop out			
B.Sc. Agric. Economics	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.Sc. Bioresouce Engineering	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.Sc. Agronomy	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Animal Heath	6	6	0	0	0	0	0	0	0	0	0	0	6	0	6
Nat. Dipl. Animal Production	5	5	0	0	0	0	0	0	0	0	0	0	5	0	5
B.Sc. Animal Science	6	6	0	0	0	0	0	0	0	0	0	0	6	0	6
B.Sc. Aquaculture	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2
Nat. Dipl. Civil Engineering	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2
B.Sc. Commercial Mixed Farming	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Crop Science	62	60	2	0	0	0	0	0	0	0	0	0	52	8	60
B.Sc. Forestry	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Forestry	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.Sc. Land Survey	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2
B.Sc. Mechanical Engineering	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Plant Production	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Veterinary Nursing	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Veterinary Technology	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.V.Sc.	1	1	0	0	0	0	0	0	0	1	1	0	2	0	2
<b>Total</b>	<b>104</b>	<b>102</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>95</b>	<b>8</b>	<b>103</b>

The table above shows that out of 105 bursary beneficiaries, 95 passed while eight failed their end-of-year examinations and two dropped out.



## 9.2 KwaZulu-Natal Department of Agriculture

**TABLE 22:** Breakdown of the end-of-year performance of bursary holders sponsored by the KwaZulu-Natal Department of Agriculture in 2012 [*n* = 164]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote exams	No. drop out	No. of awards	No. wrote exams	No. drop out	No. of awards	No. wrote exams	No. drop out	No. of awards	No. wrote exams	No. drop out			
B. Social Science (Environmental Management)	6	5	1	0	0	0	0	0	0	0	0	0	3	2	5
B.Sc. Agribusiness Management	4	4	0	0	0	0	0	0	0	0	0	0	4	0	4
B.Sc. Agriculture	24	22	2	0	0	0	1	1	0	1	1	0	20	4	24
B.Sc. Agric. Agronomy	20	20	0	0	0	0	0	0	0	0	0	0	18	2	20
B.Sc. Agric. Animal Production	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Agric. Animal Science	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B. Agric. (Extension and Rural Resource Management)	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1
B.Sc. Agric. Economics	21	21	0	0	0	0	0	0	0	1	1	0	19	3	22
B.Sc. Consumer Science Ext. and Rural	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
B.Sc. Agric. Plant Pathology	4	4	0	0	0	0	0	0	0	0	0	0	2	2	4
B.Sc. Agric. Horticulture	2	1	1	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Bioresource Engineering	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.Sc. Environmental Management	7	6	1	0	0	0	1	0	1	0	0	0	6	0	6
B.Sc. Environmental Science	11	11	0	0	0	0	0	0	0	0	0	0	11	0	11
B.Sc. Environmental Hydrology	5	5	0	0	0	0	0	0	0	0	0	0	5	0	5
B.Sc. Biological Science	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
B.Sc. Marine Biology	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Genetics	5	5	0	0	0	0	2	2	0	0	0	0	5	2	7
B.Sc. Chemistry and Chemical Technology	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Microbiology	5	5	0	0	0	0	0	0	0	0	0	0	3	2	5
B.V.Sc.	5	5	0	0	0	0	7	7	0	7	7	0	19	0	19
LLB	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
LLB. Environmental Legal Compliance	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Animal Health	9	9	0	0	0	0	0	0	0	0	0	0	9	0	9
Nat. Dipl. Agriculture	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Veterinary Technology	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Civil Engineering	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
D. Tech. Soil Conversation	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>143</b>	<b>137</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>11</b>	<b>1</b>	<b>9</b>	<b>9</b>	<b>0</b>	<b>138</b>	<b>19</b>	<b>157</b>

The table above shows that out of 164 bursary beneficiaries, 138 passed while 19 failed their end-of-year examinations and seven discontinued.

### 9.3 Limpopo Department of Agriculture

**TABLE 23:** Breakdown of the end-of-year performance of bursary holders sponsored by the Limpopo Department of Agriculture in 2012 [*n* =110]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Animal Production	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Soil Science	4	4	0	0	0	0	0	0	0	0	0	0	4	0	4
B.Sc. Pasture Science	7	7	0	0	0	0	0	0	0	0	0	0	7	0	7
B.Sc. Agric. Economics	8	8	0	0	0	0	0	0	0	0	0	0	8	0	8
B.V.Sc.	27	27	0	0	0	0	0	0	0	6	6	0	27	0	27
B.Sc. Horticulture	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.Sc. Food Science	17	17	0	0	0	0	0	0	0	0	0	0	17	0	17
B.Sc. Civil Engineering	3	3	0	0	0	0	0	0	0	0	0	0	2	1	3
B.Sc. Animal Science	1	1	0	0	0	0	0	0	0	1	0	0	1	0	1
B.Sc. Animal Health	25	25	0	0	0	0	0	0	0	0	0	0	25	0	25
B.Sc. Bioresource Engineering	8	7	1	0	0	0	0	0	0	0	0	0	7	0	7
B.Sc. Hydrology	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Plant Pathology	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Civil Engineering	4	4	0	0	0	0	0	0	0	0	0	0	4	0	4
<b>Total</b>	<b>110</b>	<b>109</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>108</b>	<b>1</b>	<b>109</b>

The table above shows that out of 110 bursary beneficiaries, 108 passed while one failed the end-of-year examinations and one dropped out.

### 9.4 Eastern Cape Department of Rural Development and Agrarian Reform

**TABLE 24:** Breakdown of the end-of-year performance of bursary holders sponsored by the Eastern Cape Department of Rural Development and Agrarian Reform in 2012 [*n* =27]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Animal Production	4	4	0	0	0	0	0	0	0	0	0	0	4	0	4
B.Sc. Soil Science	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
B.Sc. Agric. Economics	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2
B.Sc. Plant Pathology	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Civil Engineering	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Pasture Science	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Horticulture	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Crop/soil	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1

**TABLE 24:** Breakdown of the end-of-year performance of bursary holders sponsored by the Eastern Cape Department of Rural Development and Agrarian Reform in 2012 [*n* =27] (*cont.*)

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Animal Breeding	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Animal Science	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.V.Sc.	5	5	0	0	0	0	1	1	0	3	3	0	9	0	9
Nat. Dipl. Civil Engineering	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
Nat. Dipl. Horticulture	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>23</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>27</b>

The table above shows that all 27 beneficiaries passed their end-of-year examinations.

## 9.5 Western Cape Department of Agriculture

**TABLE 25:** Breakdown of the end-of-year performance of bursary holders sponsored by the Western Cape Department of Agriculture in 2012 [*n* =72]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Microbiology	1	1	0	0	0	0	0	0	0	1	1	0	2	0	2
B.Sc. Civil Engineering	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Veterinary Biology	0	0	0	2	2	0	1	1	0	0	0	0	3	0	3
B.Sc. Agric. Economics	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Agriculture	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1
B.Sc. Agric. Agronomy	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Ecology	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
B.Sc. Agricultural Soil Science	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Microbiology	1	1	0	0	0	0	0	0	0	1	1	0	2	0	2
B.Sc. Civil Engineering	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Veterinary Biology	0	0	0	2	2	0	1	1	0	0	0	0	3	0	3
B.Sc. Agric. Economics	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.V.Sc.	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
B. Bus. Social Management (Economics)	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1
B.Sc. Agric. Economics	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
B.V.Sc.	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
B. Agric. Administration	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
B. Agriculture	6	6	0	9	9	0	2	2	0	10	9	1	22	4	26
Nat. Dipl. Agricultural Management	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0

**TABLE 25: Breakdown of the end-of-year performance of bursary holders sponsored by the Western Cape Department of Agriculture in 2012 [n=72] (cont.)**

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
Nat. Dipl. Farm Management	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
Nat. Dipl. Animal Health	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
Nat. Dipl. Civil Engineering	0	0	0	4	4	0	0	0	0	0	0	0	2	2	4
Diploma in Agriculture	1	1	0	6	6	0	0	0	0	0	0	0	5	2	7
Higher Certificate	3	3	0	3	3	0	0	0	0	0	0	0	6	0	6
B. Agric. Administration (Hons)	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1
M. Inst. Agrar. Horticulture	1	1	0	1	1	0	0	0	0	0	0	0	2	0	2
M. Tech. Agricultural Management	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
M. Tech. Food Security	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>21</b>	<b>20</b>	<b>1</b>	<b>33</b>	<b>32</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>17</b>	<b>16</b>	<b>1</b>	<b>63</b>	<b>9</b>	<b>72</b>

The table above shows that out of 72 bursary beneficiaries, 63 passed while nine failed their end-of-year examinations and three dropped out.

## 9.6 Gauteng Department of Agriculture

**TABLE 26: Breakdown of the end-of-year performance of bursary holders sponsored by the Gauteng Department of Agriculture in 2012 [n=54]**

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Biotechnology	2	2	0	0	0	0	0	0	0	1	1	0	3	0	3
B.Sc. Genetics	1	1	0	0	0	0	1	1	0	0	0	0	2	0	2
B.Com. Agribusiness Management	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Biochemistry	2	2	0	0	0	0	1	1	0	1	1	0	4	0	4
B.V.Sc.	1	1	0	0	0	0	1	1	0	0	0	0	2	0	2
Nat. Dipl. Veterinary Technology	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Nat. Dipl. Biotechnology	21	21	0	0	0	0	0	0	0	0	0	0	15	6	21
B Tech. Biotechnology	8	8	0	0	0	0	0	0	0	1	1	0	9	0	9
B.Sc. Biochemistry (Hons)	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
M.Sc. Biotechnology	6	6	0	1	1	0	2	2	0	1	1	0	0	0	10
<b>Total</b>	<b>44</b>	<b>43</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>37</b>	<b>6</b>	<b>53</b>

The table above shows that out of 54 bursary beneficiaries, 37 passed while six failed their end-of-year examinations and one dropped out.

## 9.7 North West Department of Agriculture and Rural Development

**TABLE 27:** Breakdown of the end-of-year performance of bursary holders sponsored by the North West Department of Agriculture and Rural Development in 2012 [*n* =5]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Agricultural Crop Science	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
B.Sc. Agricultural Animal Science	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2
B.V.Sc.	0	0	0	0	0	0	0	0	0	2	2	0	1	1	1
<b>Total</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>3</b>

The table above shows that out of five bursary beneficiaries, three passed while two failed their end-of-year examinations.

## 9.8 Northern Cape Department of Agriculture

**TABLE 28:** Breakdown of the end-of-year performance of bursary holders sponsored by the Northern Cape Department of Agriculture in 2012 [*n* =44]

Fields of study	Race												Results		Total
	African			Coloured			Indian			White			No. passed	No. failed	
	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out	No. of awards	No. wrote xams	No. drop out			
B.Sc. Agricultural Economics	9	9	0	2	0	0	0	0	0	0	0	0	9	2	11
Nat.Dipl. Agricultural Management	3	3	0	9	9	0	0	0	0	0	0	0	8	4	12
B.Sc. Agricultural Science	3	3	0	1	1	0	0	0	0	0	0	0	4	0	4
B.V.Sc.	0	0	0	0	0	0	0	0	0	2	2	0	2	0	2
Nat.Dipl. Engineering Civil Engineering	4	4	0	0	0	0	0	0	0	0	0	0	4	0	4
Nat.Dipl. Animal Health	3	3	0	0	0	0	0	0	0	0	0	0	3	0	3
BA. Land Reform and Rural Development	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Veterinary Biology	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
B.Sc. Entomology (Hons)	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Sc. Food Science	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
B.Tech. Agric. Management	2	2	0	0	0	0	0	0	0	0	0	0	2	0	2
M.Sc. Disaster Management	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
B.Tech. Environmental Health	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>28</b>	<b>28</b>	<b>0</b>	<b>13</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>34</b>	<b>10</b>	<b>44</b>

The table above shows that out of 44 bursary beneficiaries, 34 passed while 10 failed their end-of-year examinations.

## 10. CONCLUSION

This report provided an overview of activities executed during the 2012 academic year in terms of the implementation of the DAFF's External Bursary Scheme. The report further demonstrated the need to increase access to institutions of higher learning by providing financial assistance for deserving young people to further their studies in one of the identified scarce and critical skills in agriculture, forestry and fisheries.

During the 2012 academic year, R15,7 million was allocated to implement the scheme. This budget proved to be insufficient judging by the 96 new bursaries awarded for 2012 against 883 relevant and fundable applications received from young people emanating from previously disadvantaged and poverty stricken deep rural communities. The 883 figure on applications received in response to the bursary advertisement clearly demonstrates that many young people seriously need financial assistance to further their studies, particularly in agriculture, forestry and fisheries.

From the 254 DAFF bursary beneficiaries supported in 2012, 249 wrote their final year examination and 231 (92,7%) passed their examination. Of this total, 60 completed their studies, which is an indication of good return on investment. The appointment of the technical tutor at the University of KwaZulu-Natal to specifically offer academic support and additional tutoring to the DAFF's B.Sc. Bioresource Engineering bursary holders helped to improve the performance of students from 77,3% (17 out of 22) in 2011 to 88% ( 22 out of 25) in 2012

The approval by the Director-General in 2010 to appoint completing bursary holders additional to the post establishment where directorates have the budget was the major achievement to ensure return on investment. Flowing from this approval, the B.V.Sc. and B.Sc. Bioresource Engineering bursary holders who completed their studies in 2011 were appointed as veterinarians and candidate engineers in the department during 2012.

The report further demonstrated the need for career awareness to be strengthened in fields of study that are scarce and critical in forestry and fisheries such as B.Sc. Oceanography and Marine Biology, B.Sc. Ichthyology, specialising in Aquaculture, Nat. Dipl. Oceanography and B.Sc. Forestry and Wood Science. Based on the growing interest in the programme among young people wanting to pursue studies in agriculture, forestry and fisheries scarce skills, the current budget for the scheme needs to be increased so that the sustainable growth of the agriculture, forestry and fisheries sectors may be ensured.



