Annual report

on the implementation of the External Bursary Scheme

Report no. 1 of 2005
Directorate Education and Training

agriculture

Department:
Agriculture
REPUBLIC OF SOUTH AFRICA

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DEPARTMENT OF AGRICULTURE



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1. BACKGROUND AND MANAGEMENT PROCESSES

1.1 Introduction

The Department of Agriculture Bursary Scheme is governed in terms of the External Bursary Policy as approved by DEXCO and ratified by ITCA early in 2003. A R5,3 million budget was allocated to initiate the scheme. Funds for the scheme are transferred to the National Student Financial Aid Scheme (NSFAS). NSFAS is expected to provide the audited financial statement each year.

The Directorate Education and Training is responsible for the overall administration of the scheme. An external bursary committee chaired by the Senior Manager: Education and Training is responsible for the awarding of the bursaries. Implementation, monitoring and evaluation of the scheme reside with the Subdirectorate Sector Skills Training.

1.2 Objectives

The primary objective of Agricultural Bursary Scheme is to contribute towards human resources development in the agricultural sector, in line with the following strategic objectives:

1.2.1 New entrants

To mobilise learners at pretertiary level in order to identify and nurture potential at an early stage and to have more agricultural 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 agricultural scientists in 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 agricultural sector more competitive and representative of South Africa's demographics by providing learning opportunities to those previously marginalised.

1.3 Justification and overview of current study fields funded

1.3.1 Identification of study fields

Between 2001 and 2002, the Directorate Education and Training coordinated a national project to develop a national strategy on education and training for agriculture and rural development. The subsequent national strategy was approved by the Departmental Executive Committee in 2003. Amongst others the strategy outlines a number of skills that are categorised as scarce in the agricultural sector. The following broad areas are mentioned in the strategy:

- Agricultural production
- Agricultural engineering
- Agricultural economics
- Agricultural development
- Veterinary science



Furthermore, in 2003 the Department of Labour conducted a scarce/critical skills survey in all the national departments. In terms of the questionnaire administered in this survey, only five scarce/critical skills per department were required. The list of the Department of Agriculture exceeded five. The following skills were forwarded to the Department of Labour as scarce/critical skills in agriculture. The list includes:

- State Veterinarians
- Professional Engineers
- Plant Health Specialists
- Viticulturists
- Food Safety and Quality Assurance Specialists
- Agricultural Economics (macroeconomic research econometrics, product and resource economics)
- Agricultural Product Technicians
- Seed and Plant Auditors
- IT personnel (managers, technologists, information specialists)
- Finance personnel

These scarce/critical skills were a feedback obtained from various managers in the department and in the sector.

1.3.2 Description of study fields

This section attempts to provide a brief outline of the various study disciplines that are supported in terms of the External Bursary Scheme. With the exception of the Agricultural Industry Development Programme, all other disciplines require a pass in Mathematics, Physical Science and Biology. The Agricultural Industry Development Programme is designed for individuals with a minimum of a Diploma in Agriculture or 5 years' work experience in an agribusiness environment.

1.3.2.1 Bachelor of Veterinary Science (B.V.Sc.)

Veterinarians provide services to farmers, pet owners, breeders, animal welfare organisations, game reserves, zoos, etc. At government level they are involved in regulatory services, i.e. diagnostic services, prevention of disease and eradication of diseases. They are also concerned with small and large animal practices and the conducting of research. The interest lies in the medical field with a special love for animals.

1.3.2.2 Bachelor of Science (B.Sc. Agric. Engineering)

These engineers plan, design and develop the equipment or infrastructure needed for the production and processing of agricultural products and they specialise in a specific field such as agricultural mechanisation, soil and water conservation, agricultural structures, irrigation and drainage, and technology for food processing.

1.3.2.3 Bachelor of Science in Agriculture majoring in Viticulture (B.Sc. Agric. Viticulture)

Apply plant science principles to manipulate the vine to produce the kind of grapes necessary for the production of different wine types and styles.



1.3.2.4 Bachelor of Science in Agriculture majoring in Agricultural Economics (B.Sc. Agric. Economics)

These are economists who studied economics with special emphasis on the food systems, natural resources, environmental policy and economic development and, as such, whose area of specialisation is focused on the agricultural sector. They analyse and advise the optimal use of production factors for the environmentally sustainable production of food and fibres in an internationally competitive market. They are also concerned with all economic activities, which include the manufacturing and distribution of agricultural means of production, the farming process, determination of government policy concerning agricultural and consumption affairs, purchasing, processing and distribution of agricultural products as well as the international trade policies.

1.3.2.5 Bachelor of Food Science (B.Sc. FS)

Food scientists are responsible for food examinations and inspections to ensure that food is healthy and safe for human consumption. Their functions revolve around the following areas:

- Investigating the basic nature of food and its nutritional, physical and chemical properties
- Research into new and economical production procedures
- Development of new and safe food products
- Management within companies involved in food processing and preservation

1.3.2.6 Bachelor of Technology in Food Technology (B.Tech. FT)

Food technologists are concerned with aspects pertaining to the production, preservation and development of high-quality foods. They also manage processing plants and quality assurance laboratories. They are charged with monitoring of food quality standards by government bodies.

1.3.2.7 Bachelor of Technology in Food and Consumer Science (B.Tech. FCS)

The course is designed to train students for the food manufacturing and retail industries and small entrepreneurial food operations. Students specialise in various aspects of fresh convenience food development, production and marketing for the food manufacturing and retail industries.

1.3.2.8 Diploma in Agriculture (Dipl. Agric.)

The National Diploma in Agriculture emphasises small-stock production and agricultural management. Hands-on practice training develops the technical and theoretical skills and knowledge of the students.

1.3.2.9 Agricultural Industry Development Programme (AIDP)

The Agricultural Industry Development Programme is a generalist management programme targeting junior and middle managers in the agricultural industry, particularly those involved or intending to participate in agribusiness. The overall theme of the programme is to achieve and sustain trendsetting performance through high quality leadership, management of change and a keen understanding of the functional aspects of management. The programme therefore aims to improve the participants' managerial capabilities, develop their business skills, enhance their capacity for personal change and implementation change, enhance their understanding of the imperatives directing vision, mission and strategies of their companies and enhance their ability to understand and implement the strategy.



1.3.2.10 Diploma in Veterinary Technology

The preparation of veterinary biological products such as vaccines for the prevention of diseases and antigens for diagnostic tests is the task of the veterinary technologist. It includes the cultivation of bacteria and viruses, as well as development work in fermentation technology.

1.4 Bursary management process

1.4.1 Advertisement of bursary awards

The process of advertising bursaries starts with the collection of information on the priorities of all the directorates in the department including the needs of provinces and other agricultural entities. Once the information has been received, it is analysed. The advert is then drafted and taken to the Directorate Agricultural Information Services (AIS) for editing and layout. Once this step has been finalised the Directorate AIS, in partnership with the Directorate Education and Training, obtains quotations from Government Communications and Information System (GCIS). A letter of guarantee is then forwarded from the DoA to GCIS committing the department to pay within a period not exceeding 30 days. The advertisement will then appear in major national newspapers such as the Sunday Times, City Press and Business Day. This process takes place annually and culminates in a national advertisement in the month of July.

Invariably the advertisement will specify the different awards that are offered in terms of the DoA External Bursary Scheme. For example, for the 2004 awards, the following categories were advertised:

- 30 bursaries for Bachelor of Veterinary Science (B.V.Sc.)
- 25 bursaries for B.Sc. Agric. Engineering
- 25 bursaries for Agricultural Engineering Technicians
- 10 bursaries for B.Sc. Viticulture
- 10 bursaries for the Diploma in Viticulture
- 20 bursaries for young farm business managers intending to study for an Agricultural Industry Development Programme.

In response to the 2004 advert, a total of 816 (eight hundred and sixteen) applications from the public were received as follows:

- 60 applications for Bachelor of Veterinary Science
- 68 applications for Agricultural Engineering
- 16 applications for B.Sc. Viticulture
- 9 applications for the Agricultural Industry Development Programme
- 61 applications from learners at high school level
- 580 applications were totally irrelevant in the sense that they were not involving any of the advertised fields of study

For 2005 the advert followed a similar pattern:

- 20 bursaries targeting high school learners with a subject combination of Mathematics, Science and Biology on higher grade
- 30 bursaries for Bachelor of Veterinary Science (B.V.Sc.)
- 20 bursaries for B.Sc. Agric. Engineering
- 10 bursaries for Industrial Technician Diploma



- 10 bursaries for B.Sc. Viticulture
- 10 bursaries for Diploma in Viticulture
- 10 bursaries for B.Sc. Agric. Economics
- 10 bursaries for B.Sc. Food Science and B. Tech. Food Technology
- 20 bursaries for postgraduate studies in different agricultural study fields

A total of 140 bursary awards were advertised. In response to the advert the following information was recorded:

- 178 applications for high school learners
- 88 applications for Bachelor of Veterinary Science
- 55 applications for Viticulture
- 119 applications for Agricultural Economics
- 98 applications for Agricultural Engineering
- 73 applications for Food Science/Technology
- 58 applications for postgraduate studies
- 32 applications for the Agricultural Industry Development Programme
- 16 applications for the Diploma in Agriculture
- 4 applications for Veterinary Technology
- 506 applications were totally irrelevant in the sense they were not involving any of the advertised fields of study

A total of 1 227 applications from the public were received.

1.4.2 Selection of qualifying bursars

The entry requirements for all the fields of study vary. However all of them require matric exemption with Physical Science, Biology and Mathematics on higher grade for admission.

1.4.3 Strategy used to mobilise learners at pretertiary level

As a strategy to counteract the lack of interest of learners in agricultural studies the Department of Agriculture initiated a pilot project to assist the learners from high school level. The Directorate Education and Training designed and facilitated a pilot project to create agriculture awareness among schoolgoing learners in selected schools in the Northern Cape and KwaZulu-Natal. In terms of the pilot project, six schools were selected in each of the two provinces. Learners in these schools are given as much information about agriculture as possible. The careers that agriculture offers are explained in detail. Learners in grades 11 and 12 with the right subject combination, with an interest in agriculture, are then targeted with the understanding that these learners will pursue scarce agricultural careers at tertiary level and beyond. The intended outcome of the pilot project is therefore to establish a base at school level from which scarce agricultural skills such as those currently sponsored by the DoA Bursary Scheme, will be developed.

The goal of the project is to create agricultural awareness among schoolgoing learners while at the same time creating an integrative link between learners' choice of agricultural studies, the department's bursary programme and the Experiential Training Programme. The four objectives of the pilot project are to:

- Create awareness among the youth, particularly from historically disadvantaged communities, of the careers and opportunities offered by agriculture
- Lay a sound foundation at school level to access agricultural science at tertiary level for further studies and enter agriculture as a career of choice



- Expose schoolgoing youth to practical agriculture as early as possible
- Identify learners, as early as at school level, to be worthy recipients of the department's bursary for further studies in agriculture

1.4.4 Placement of bursars at the various institutions of learning

The placement of bursars involves ensuring the movement of bursars from their respective homes to the institutions of learning where they have been admitted for studies. This involves the following: ensuring that bursars have transport fees and transport from home to the destined institutions of learning, bursars have direction maps of the areas where the institutions of learning are situated bursars know the exact location of alighting the public transport, know who will be welcoming them at their destination and where they will be accommodated. Once they have arrived at the institutions of learning, the process also involves informing them at which offices to start.

1.4.5 Monitoring and evaluation of partners and learners

Monitoring and evaluation forms a critical step in ensuring the success of the bursary scheme. The process involves the physical visiting of institutions, bursars and the National Students Financial Aid Scheme (NSFAS) respectively. Such visits should be timely for them to be effective. Once the bursars have been placed in various institutions of learning, the NSFAS is then visited. The purpose of such a visit is to define communication channels between the DoA and the NSFAS, thereby enhancing an effective partnership. The visit is also meant to agree on processes of the transfer of funds to the institutions of learning and the need for an audited financial statement at the beginning of each financial year.

The visits to the institutions of learning aim at meeting with the finance/bursary sections to agree on the handling of the bursars. Agreements will include arrangements for the timely purchasing of books by the bursars, payment of allowances to the bursars, issues of acommodation and the institution's student support systems. Agreements also include communication channels between the institution of learning and the DoA.

The visits to the bursars involve convening formal meetings with them as groups in various localities where the institutions of learning are situated. These formal meetings are characterised by an agenda and minute taking. Bursars' obligations in terms of the Bursary Policy are outlined administrative issues explained and individual bursar problems listened to. Bursars are further encouraged to share information and are encouraged to support each other. For the first time bursars of the DoA in the same institution of learning are able to come together and know each other. A motivational talk also forms part of the day's agenda.

The second visits to the institutions take place after the mid-term results. The purpose of the visits is to review the entire first semester and the end of first semester examinations performance.

2. ANALYSIS OF THE 2004 BURSARY INTAKE

2.1 Bursaries awarded in 2004

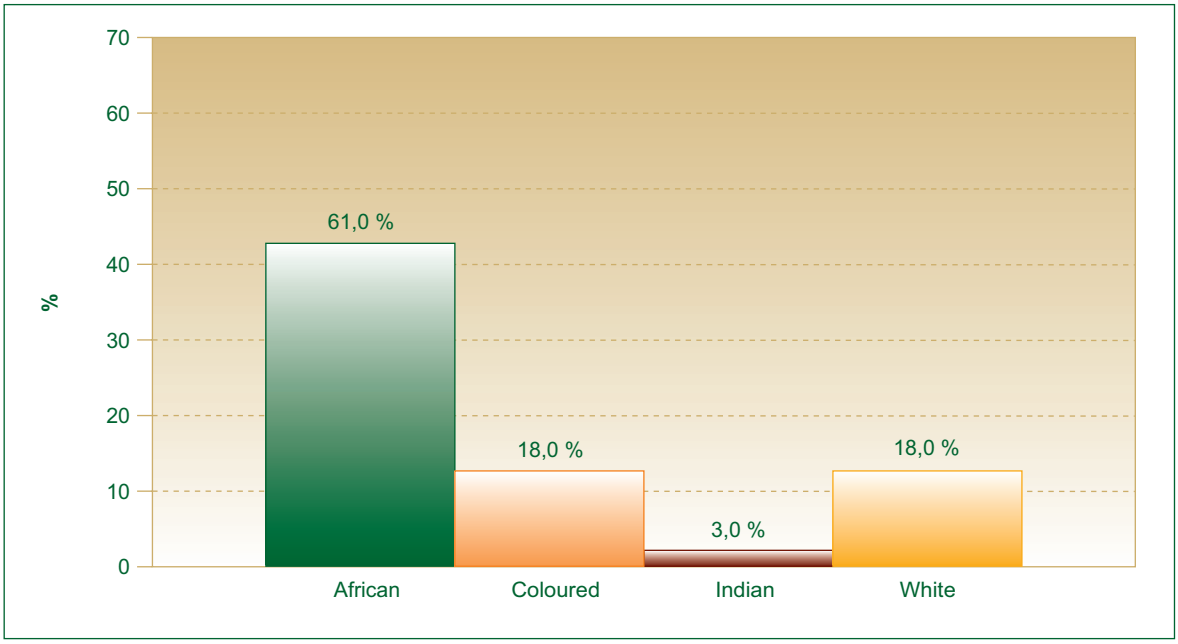
A total of 126 (one hundred and twenty six) bursaries were awarded in 2004. Owing to lack of applicants with good grades in Mathematics, Physical Science and Biology, the number of bursaries awarded at further education level (foundation and secondary) were increased so as to create a high pool of applicants from 2005 onwards. The beneficiaries are grouped into higher education awards and further education awards. A detailed breakdown is provided in Tables 1 and 2.



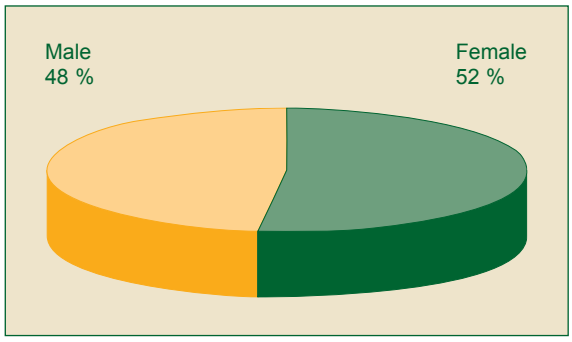
2.1.1 *Higher education awards*

TABLE 1. A comprehensive breakdown of higher education bursary awards for the 2004 academic year, N = 66

Field of study	Race								Gender				Total
	African		Coloured		Indians		Whites		Male		Female		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
B.V.Sc.	11	61	0	0	2	11	5	28	8	44	10	56	18
B.Sc. Agric. Engineering	4	100	0	0	0	0	0	0	4	100	0	0	4
B.Sc. Viticulture	8	67	3	25	0	0	1	8	4	33	8	67	12
B. Agric. Viticulture	5	50	5	50	0	0	0	0	6	60	4	40	10
B. Tech. Food Technology	1	20	2	40	0	0	2	40	2	40	3	60	5
B. Tech. Food and Consumer Science	3	60	0	0	0	0	2	40	2	40	3	60	5
Diploma in Agriculture	5	71	2	29	0	0	0	0	5	71	2	29	7
Diploma in Veterinary Technology	3	60	0	0	0	0	2	40	2	40	3	60	5
Total	40	61	12	18	2	3	12	18	33	50	33	50	66



GRAPH 1. Breakdown of bursary beneficiaries in terms of race for 2004



GRAPH 2. Breakdown of bursary beneficiaries in terms of gender for 2004

Results in Table1, indicate that B.V.Sc. has the highest number of beneficiaries, 18 followed by B.Sc. Agric. Viticulture with 12. The lowest number of beneficiaries was recorded in the field of B.Sc. Agric. Engineering. Comparing the number of successful applicants to the total number of applications received as highlighted under section 1.4.1, it is evident that few applicants met the academic entrance requirements as prescribed by the various academic institutions of learning. A further analysis of the beneficiaries in terms of race and gender is presented in Graphs 1 and 2.

The graph shows that the majority of the beneficiaries were Africans, 40 (61 %) followed by Coloureds and Whites, 12 (18 %) respectively. All the White beneficiaries were female.

In terms of gender the allocation was evenly balanced between males and females with 50 % each.

2.1.2 *Further education awards*

The further education awards are mainly beneficiaries of a pilot project in KwaZulu-Natal. A detailed breakdown is presented in Table 2.

TABLE 2. A comprehensive breakdown of all further education bursary awards for the 2004, N = 60

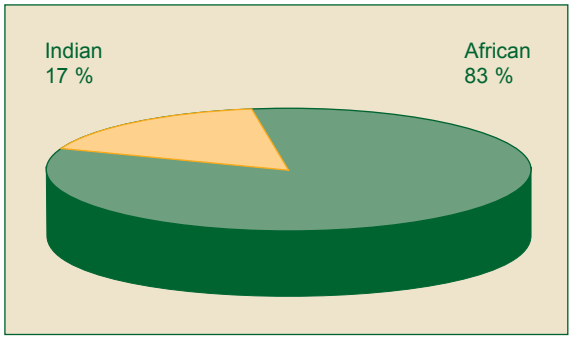
Field of study	Race				Gender				Total
	African		Indian		Male		Female		
	No.	%	No.	%	M	%	F	%	
Grade 12	20	80	5	20	12	48	13	52	25
Grade 11	20	80	5	20	14	56	11	44	25
Grade 7	5	100	0	0	2	40	3	60	5
Grade 6	5	100	0	0	2	40	3	60	5
Total	50	83	10	17	30	50	30	50	60

In terms of the results from Table 2, there were 60 high school students who were offered bursaries by the Department of Agriculture: 25 bursaries for grade 11 and 12 and 10 bursaries for grades 6 and 7. A further analysis of the beneficiaries is presented in Graphs 3 and 4.

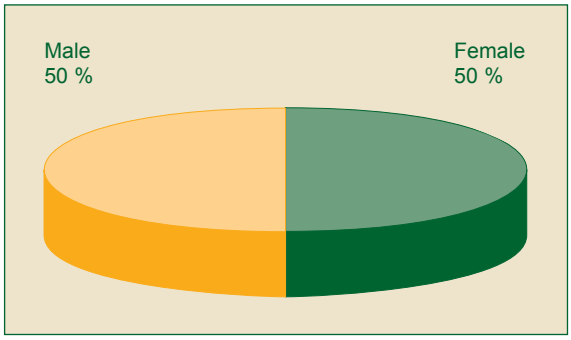
In terms of race 83,3 % of the beneficiaries are Africans, while the remaining 16,7 % are Indians.

In terms of gender the bursaries were shared equally between males and females with 50 % each.





GRAPH 3. Breakdown of high school bursary beneficiaries in terms of race



GRAPH 4. Breakdown of high school bursary beneficiaries in terms of gender

2.2 Performance of learners

Results of learners were analysed. The purpose of analysing results is to measure the academic performance of learners as well as the success rate of the bursary scheme. Learners' performance is measured by verifying results with academic institutions. A report indicating that a learner qualifies to proceed to the next year of study is used as a measurement of the learner's performance.

2.2.1 Higher education performance

TABLE 3. An analysis report on performance of higher education bursars by end of 2004, N = 66

Field of study	No. passed	% passed	No. failed	% failed	Total
B.V.Sc.	15	83	3	17	18
B.Sc. Agric. Engineering	3	75	1	25	4
B.Sc. Agric. Viticulture	11	92	1	8	12
B. Agric. Viticulture	8	80	2	20	10
B. Tech. Food Technology	5	100	0	0	5
B. Tech. Food and Consumer Science	4	80	1	20	5
Diploma in Agriculture	6	86	1	14	7
Diploma in Veterinary Technology	4	80	1	20	5
Total	56	85	10	15	66

Results in Table 3 demonstrate that 56 (85 %) of the beneficiaries passed their examinations at the end of 2004. Three of the fifty-six completed their degrees. Two completed the B.Sc. Agric. degree in Viticulture and one completed the B.Sc. Agric. in Engineering. One of those who completed the B.Sc. Agric. in Viticulture is an African female and has continued with B.Sc. Agric. Hons in Viticulture at the University of Stellenbosch.

In interpreting the results in Table 4 it is important to bear in mind that in terms of the information in Table 1, there were 66 beneficiaries of the bursary scheme. In terms of racial breakdown 40 were Africans, 12 Coloureds, 2 Indians and 12 Whites. Based on the results in Table 4 it is evident that 33 of the 40 Africans (82.5%), 9 of the 12 Coloureds (75 %), 2 of the 2 Indians (100 %) and 12 of the 12 Whites (100 %) passed their examinations.



TABLE 4. An analysis report on bursars who passed per race and gender, N = 56

Field of study	Race								Gender				Total
	African		Coloured		Indian		White		Male		Female		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
B.V.Sc.	8	53	0	0	2	13	5	33	6	40	9	60	15
B.Sc. Agric. Engineering	3	100	0	0	0	0	0	0	3	100	0	0	3
B.Sc. Viticulture	7	64	3	27	0	0	1	9	3	27	8	73	11
B. Agric. Viticulture	5	63	2	38	0	0	0	0	4	50	4	50	8
B. Tech. Food Technology	1	20	2	40	0	0	2	40	2	40	3	60	5
B. Tech. Food and Consumer Science	2	50	0	0	0	0	2	50	2	50	2	50	4
Diploma in Agriculture	4	75	2	25	0	0	0	0	4	50	2	50	6
Diploma in Veterinary Technology	3	100	0	0	0	0	2	0	2	50	2	50	4
Total	33	59	9	16	2	4	12	21	26	46	30	54	56

TABLE 5. A breakdown of higher education bursars who failed their 2004 examinations in terms of race and gender, N = 10

Field of study	Race				Gender				Total
	African		Coloured		Male		Female		
	No.	%	No.	%	No.	%	No.	%	
B.V.Sc.	3	100	0	0	2	67	1	33	3
B.Sc. Agric. Engineering	1	100	0	0	1	100	0	0	1
B.Sc. Viticulture	1	100	0	0	1	100	0	0	1
B. Agric. Viticulture	0	0	2	100	2	100	0	0	2
B.Tech. Food and Consumer Science	1	100	0	0	0	0	1	100	1
Diploma in Agriculture	0	0	1	100	0	0	1	100	1
Diploma in Veterinary Technology	1	100	0	0	1	100	0	0	1
Total	7	70	3	30	7	70	3	30	10

In terms of the data in Table 5 a total of 10 learners failed their examinations. All those who failed were first year students and the majority were Africans (70 %) and males (70 %). The highest number was recorded in B.V.Sc. with 3, followed by B. Agric. Viticulture with 2.



2.2.2 *Further education performance*

A total of 60 further education learners passed their examinations at the end of 2004. A detailed breakdown in terms of grades is presented in Table 6.

TABLE 6. A breakdown of further education bursars who passed at the end of year

Field of study	No. passed	% passed	Total
Grade 12	25	100	25
Grade 11	25	100	25
Grade 7	5	100	5
Grade 6	5	100	5
Total	60	100	60

The results in Table 6 show that all further education bursars passed in 2004. The pass rate is 100 %. About 16 (64 %) of grade 12 learners were admitted to universities to study the various scarce skills in Agriculture. The remaining number was admitted to study at diploma level. It should be noted that these were mostly beneficiaries of the pilot project.

2.3 Financial expenditure

2.3.1 *Higher education expenditure*

The information provided is based on unaudited financial statements from the NSFAS. An audited financial report is due to be submitted to the department as per Auditor-General timeframe of operation. A breakdown report for higher education beneficiaries is presented in Table 7.

TABLE 7. Breakdown information on the bursary expenditure for the 2004 academic year

Field of study	No. of students	Amount (R)	Expenditure (%)
B.V.Sc.	18	817 662	33,0
B.Sc. Agric. Engineering	4	142 728	5,8
B.Sc. Viticulture	12	544 386	21,9
B. Agric. Viticulture	10	363 350	14,6
B. Tech. Food Technology	5	131 570	5,3
B. Tech. Food and Consumer Science	5	145 674	65,9
Diploma in Agriculture	7	152 491	6,1
Diploma in Veterinary Technology	5	182 730	7,4
Total	66	2 480 591	100,0

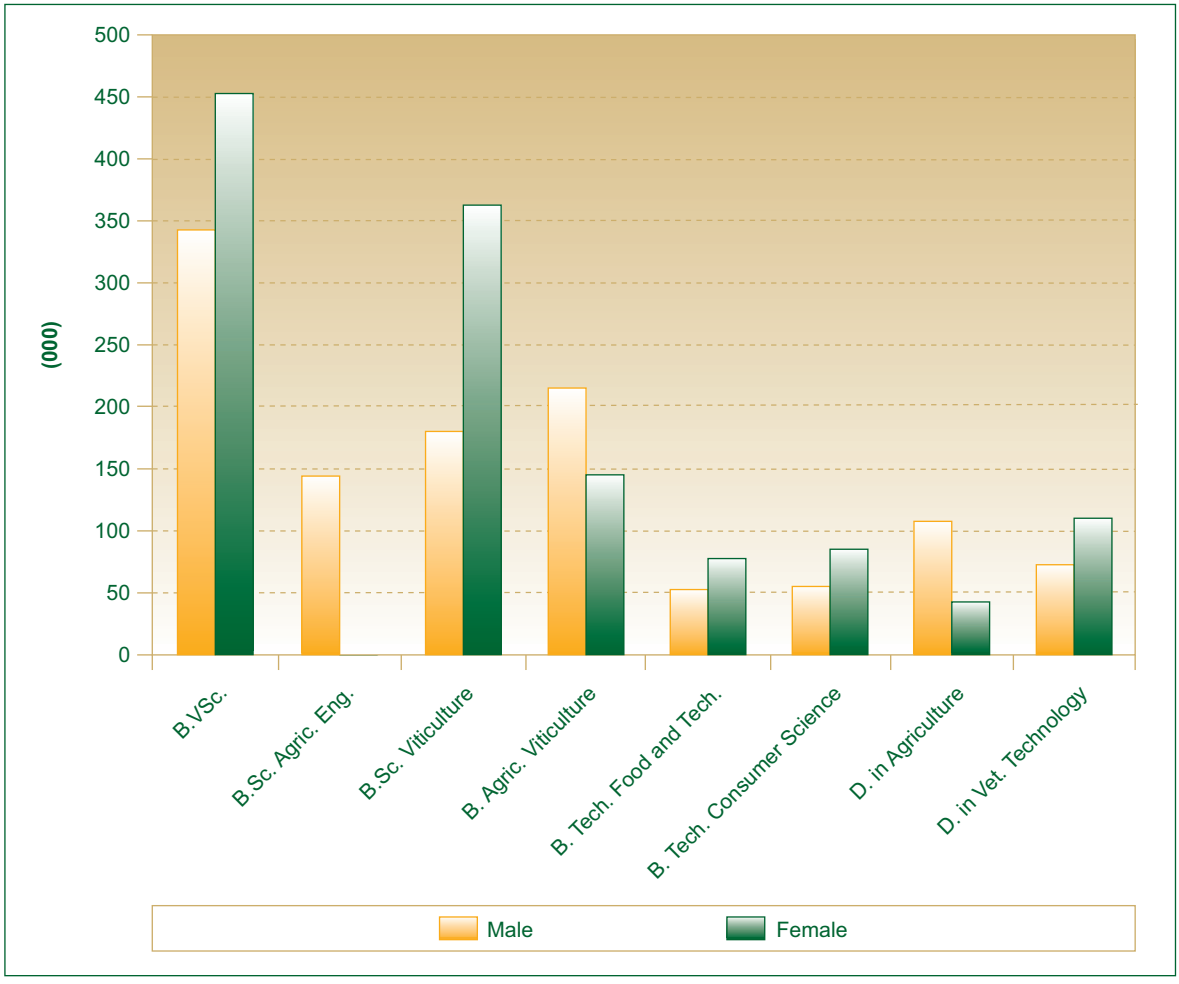
Altogether R2 480 591 was spent on higher education bursaries. The highest expenditure was recorded in the field of Veterinary Sciences with R817 662 (18 %) while the lowest expenditure was recorded in the field of B.Tech. Food Technology with R131 570 (5,3 %). In terms of cost per learner B.V.Sc. had the highest cost of R45 426 while Diploma in Agriculture was the lowest with R21 784.

A further analysis on the financial expenditure on higher education bursars is presented in Table 8 and Graph 5.



TABLE 8. An analysis report on financial expenditure in terms of race for 2004

Field of study	African		Coloured		Indian		White		Total
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	
B.V.Sc.	11	626 752	0	0	2	66 200	5	124 710	817 662
B.Sc. Agric. Engineering	4	142 728	0	0	0	0	0	0	142 728
B.Sc. Viticulture	8	367 086	3	132 428	0	0	1	44 872	544 386
B. Agric. Viticulture	5	181 675	5	18 1675	0	0	0	0	363 350
B. Tech. Food Technology	1	26 810	2	52 380	0	0	2	52 380	131 570
B. Tech. Food and Consumer Science	3	87 894	0	0	0	0	2	57 780	145 674
Diploma in Agriculture	5	100 955	2	51 536	0	0	0	0	152 491
Diploma in Veterinary Technology	3	108 610	0	0	0	0	2	74 120	182 730
Total	40	1 642 510	12	418 019	2	66 200	12	353 862	2 480 591



GRAPH 5. A breakdown structure of expenditure per gender for 2004



The results in Table 8 show that most of the funds R1 642 511 (66,2 %) was spent on Africans bursars, R418 019 (16,9 %) was spent on Coloured bursars, R66 200 (2,7 %) was spent on Indians and R353 862 (14,3 %) was spent on White bursars.

In terms of gender for B.VSc. R450 000 was spent on females and the other R350 000 was spent on male beneficiaries. In most fields of study female beneficiaries dominate, except in the B. Agric. Viticulture and Diploma in Agriculture. It should be noted, however, that no females benefited from the B.Sc. Agric. Engineering field.

2.3.2 *Further education expenditure*

A breakdown of the financial expenditure for further education beneficiaries is presented in Tables 9 and 10.

TABLE 9. Breakdown information on the bursary expenditure for further education learners

Field of study	No. of beneficiaries	Amount in Rands
Grade 12	25	174 635
Grade 11	25	163 909
Grade 7	5	46 700
Grade 6	5	46 700
Total	60	431 944

Table 9 shows that the total of R431 944 was spent on the further education. About R174 635 was spent on Grade 12, followed by R163 909 awarded to grade 11. Grades 6 and 7 were awarded R46 700 per grade.

TABLE 10. An analysis report on financial expenditure in terms of race for further education learners

Field of study	Africans		Indians		Total
	No.	Amount	No.	Amount	
Grade 12	20	134 545	5	40 090	174 635
Grade 11	20	126 179	5	37 730	163 909
Grade 7	5	46 700	0	0	46 700
Grade 6	5	46 700	0	0	46 700
Total	50	354 124	10	77 820	431 944

The results in Table 12 show that R354 124 was spent on African bursars and R77 820 was spent on Indians. There were no Coloureds who benefited in the pilot project.

3. ANALYSIS OF THE 2005 INTAKE

3.1 Bursary awards in 2005

A total of 114 bursaries were awarded in 2005 in addition to the 2004 intake. A breakdown of the beneficiaries is presented in Table 11.



3.1.1 *Higher education awards*

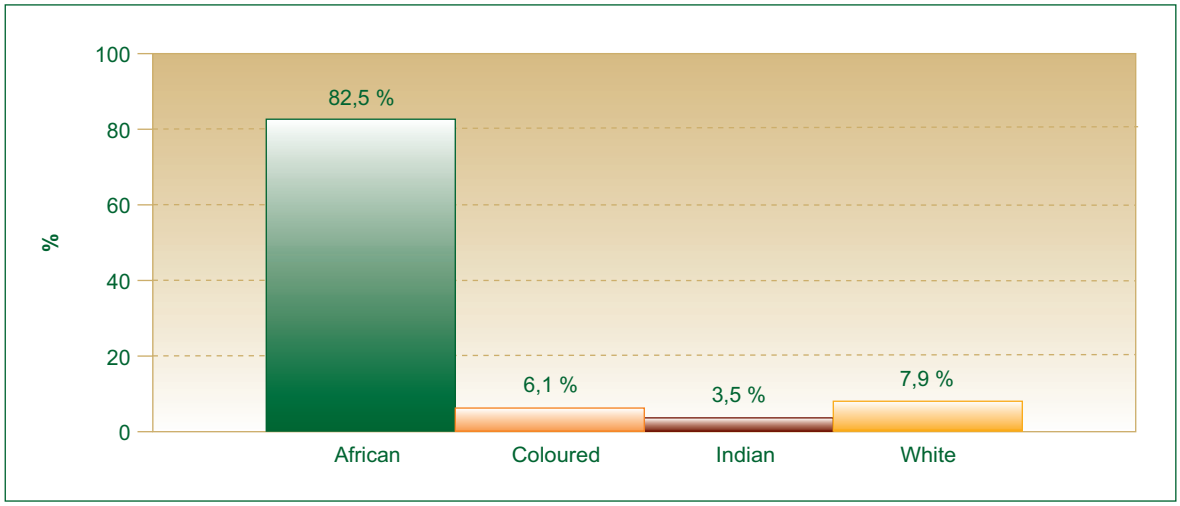
TABLE 11. A comprehensive breakdown of all bursary awards for 2005 academic year.

Field of study	Race								Gender				Total
	African		Coloureds		Indians		Whites		Male		Female		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Ph.D.	2	100	0	0	0	0	0	0	1	50	1	50	2
Masters	14	100	0	0	0	0	0	0	10	71	4	29	14
Hons	4	100	0	0	0	0	0	0	0	0	4	100	4
B.V.Sc.	5	31	2	13	1	6	8	50	6	38	10	63	16
B.Sc. Agric. Engineering	6	75	0	0	2	25	0	0	2	25	6	75	8
B. Tech. Engineering	6	100	0	0	0	0	0	0	6	100	0	0	6
B.Sc. Viticulture	4	67	1	17	0	0	1	17	3	50	3	50	6
B. Agric. Viticulture	7	78	2	22	0	0	0	0	6	67	3	33	9
B.Sc. Agric. Economics	9	90	0	0	1	10	0	0	5	50	5	50	10
B.Sc. Food Science	4	100	0	0	0	0	0	0	1	25	3	75	4
B. Tech. Food Technology	6	100	0	0	0	0	0	0	1	17	5	83	6
Diploma in Agriculture	2	50	2	50	0	0	0	0	2	50	2	50	4
Agricultural Industry Development Programme (AIDP)	25	100	0	0	0	0	0	0	12	48	13	52	25
Total	94	82	7	6	4	4	9	8	55	48	59	52	114

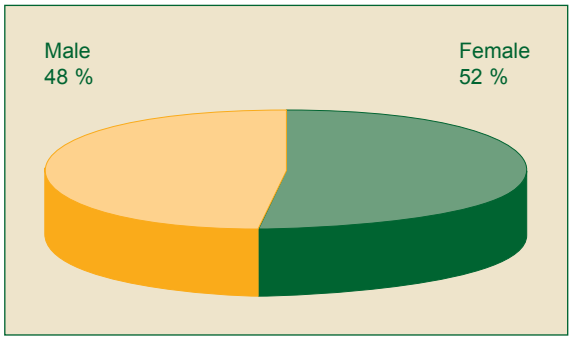
Results in Table 11 clearly show that about seven new fields were added for the 2005 intake. These include the three levels of postgraduate, B. Tech. Engineering, B.Sc. Agric. Economics, B.Sc. Food Science and AIDP. The highest number of allocation is in the field of AIDP, which is used to stimulate entrepreneurial spirit among the African youth. It is followed by B.V.Sc. with 16 and M.Sc. with 14.

A further analysis of the intake is presented in Graphs 5 and 6.





GRAPH 6. Breakdown of bursary beneficiaries in terms of race for 2005



GRAPH 7. Breakdown of bursary beneficiaries in terms of gender for 2005

In terms of allocation Africans are the major beneficiaries with 94 (82 %). Other racial groups are sharing the remaining 18 %. The major concern is the lowest number of beneficiaries from the Coloured and Indian communities.

In terms of gender 48 % of the beneficiaries are male and the other 52 % are female. This shows a 2 % increase in the total intake of female bursars compared to the 2004 bursary intake.

3.1.2 *Further education awards*

No new bursaries have been awarded to date except to continue with Grades 11, 6 and 7 of 2004 as they have proceeded to senior classes in 2005.

It is expected that additional bursaries will be allocated to learners in the Northern Cape as part of the project in agricultural awareness.

3.1.3 *Projected financial expenditure*

The figures indicated in Table 12 are based on the fees structure of the academic institution and may vary among students, depending on year of study and the expenditure such as recommended textbooks and field attachments.



TABLE12. A projection of financial expenditure for the 2005 intake

Field of study	No. of beneficiaries	Amount (R)	Expenditure (%)
B.V.Sc.	16	834 047	20,3
B.Sc. Agric. Eng.	8	289 830	7,1
B Tech. Eng.	6	150 084	3,7
B.Sc. Agric. Viticulture	6	277 087	6,8
B. Agric. Viticulture	9	337 455	8,2
B.Sc. Food Science	4	137 113	3,3
B. Tech. Food Tech.	6	117 312	2,9
B.Sc. Agric. Economics	10	338 693	8,3
Diploma in Agriculture	4	75 760	1,8
Postgraduate	20	646 552	15,9
Agric. Industrial Development	25	900 000	21,9
Total	114	4 103 933	100,0

It is estimated that the AIDP will cost the department R900 000. The next highest expenditure is expected from the B.V.Sc., followed by postgraduate studies. Altogether R4 103 933 is expected to be spent on the 2005 higher education bursary beneficiaries. The latter amount excludes those learners proceeding from the 2004 academic year. A combined projection of the total fees cost for 2005 (Including 2004 intake will be presented in Table 16 on page 30).

TABLE 13. An analysis report on financial expenditure in terms of race for 2005

Field of study	Race								
	African		Coloured		Indians		Whites		Total
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	
Ph.D.	2	59 025	0	0	0	0	0	0	59 025
Masters	14	456 965	0	0	0	0	0	0	456 965
Hons	4	130 562	0	0	0	0	0	0	130 562
B.V.Sc.	5	260 640	2	104 256	1	52 127	8	417 024	834 047
B.Sc. Agric. Engineering	6	217 373	0	0	2	72 457	0	0	289 830
B. Tech. Engineering	6	150 084	0	0	0	0	0	0	150 084
B.Sc. Viticulture	4	184 752	1	46 181	0	0	1	46 181	277 114
B. Agric. Viticulture	7	262 465	2	74 990	0	0	0	0	337 455
B.Sc. Agric. Economics	9	304 824	0	0	1	33 869	0	0	338 693
B.Sc. Food Science	4	137 113	0	0	0	0	0	0	137 113
B. Tech. Food Technology	6	117 312	0	0	0	0	0	0	117 312
Diploma in Agriculture	2	37 880	2	37 880	0	0	0	0	75 760
Agricultural Industry Development Programme (AIDP)	25	900 000	0	0	0	0	0	0	900 000
Total	94	3 218 995	7	263 307	4	158 453	9	463 205	4 103 960



The results in Table 13 show that most of the funds R3 218 995 (78 %) will be spent on African bursars, R263 307 (6 %) will be spent on Coloured bursars, R158 453 (4 %) will be spent on Indians and R463 405 (11 %) on White bursars.

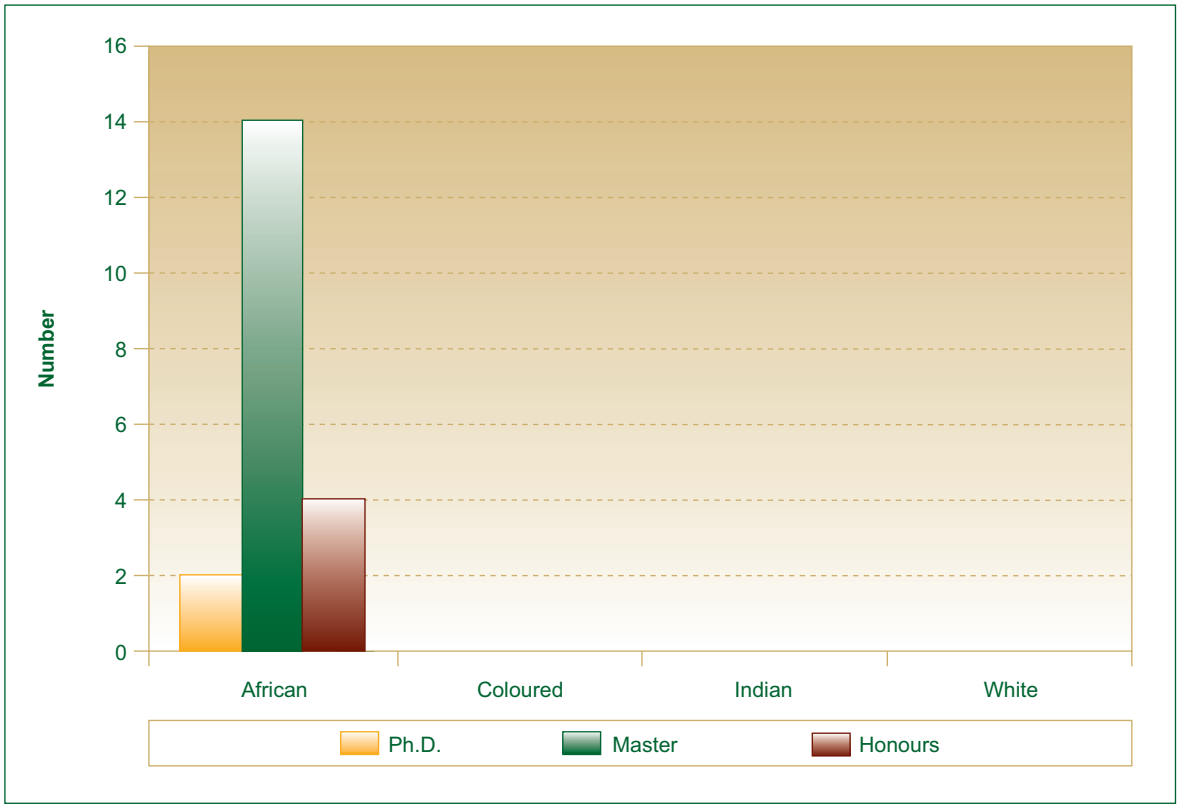
4. CURRENT STATUS OF THE BURSARY AWARDS

4.1 Level of study

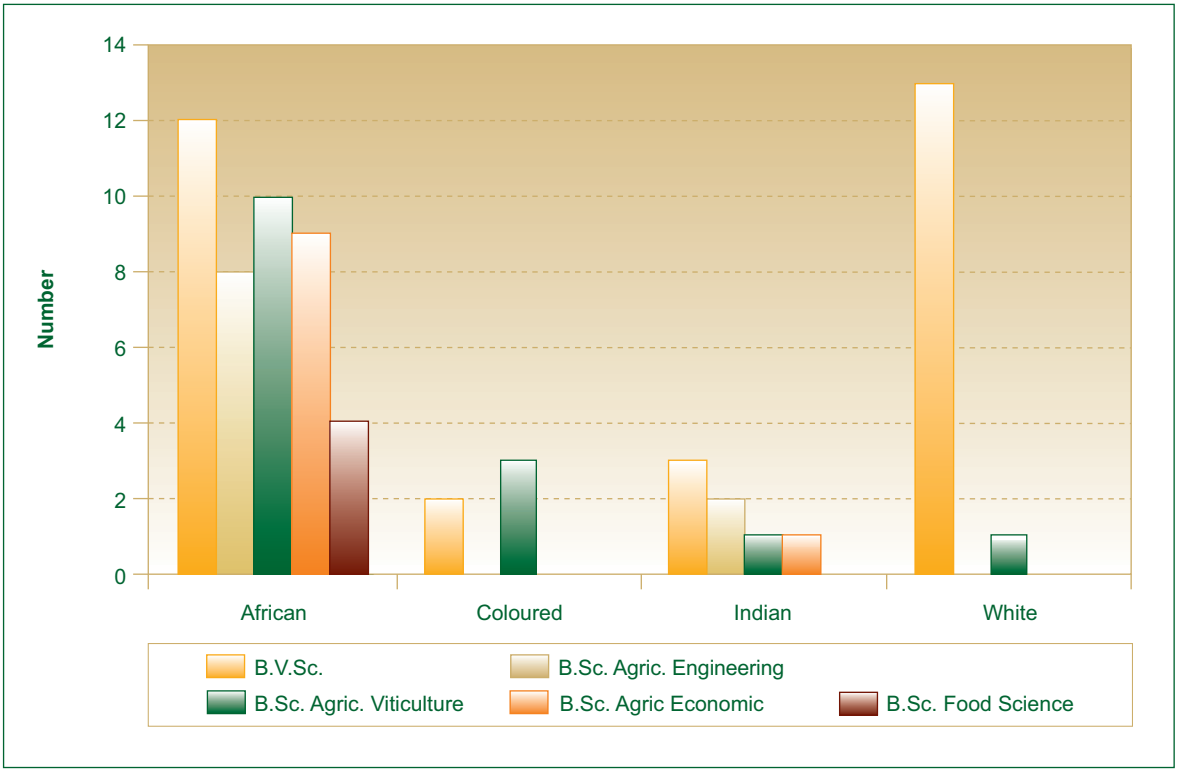
TABLE 14. An analysis report on the year level of study for the bursars

Field of study	Year of study							Total number	Total duration of study
	1	2	3	4	5	6	7		
PhD	1	1	0	-	-	-	-	2	3
Masters	5	6	3	-	-	-	-	14	2
Hons	4	-	-	-	-	-	-	4	1
B.V.Sc.	4	4	16	2	3	-	1	30	7
B.Sc. Agric. Engineering	5	2	3	0	-	-	-	10	4
B. Tech. Engineering	1	2	1	2	-	-	-	6	4
B.Sc. Viticulture	4	7	2	2	-	-	-	15	3
B. Agric. Viticulture	7	7	3	0	-	-	-	17	4
B.Sc. Agric. Economics	5	2	2	1	-	-	-	10	3
B.Sc. Food Science	1	0	0	3	-	-	-	4	4
B. Tech. Food Technology	4	0	5	2	-	-	-	11	4
B. Tech. Food and Consumer Science	0	0	4	0	-	-	-	4	4
Diploma in Agriculture	0	4	4	-	-	-	-	8	3
Diploma in Veterinary Tech.	0	0	4	-	-	-	-	4	3
Agricultural Develop-ment Programme	25	-	-	-	-	-	-	25	1
Pilot/high schools	35	-	-	-	-	-	-	35	1
Total	101	35	47	12	3		1	199	

Table 14 shows the total number of bursars currently awarded bursaries. This includes both the 2004 and the 2005 intake. There are 101 bursars who are currently doing first year level. About 35 bursars are doing second year level. There are 47 bursars who are currently registered for third year level. There are 12 bursars who are currently doing their fourth year level. There are 3 bursars in the firth year level. There is 1 bursar currently doing seventh year for B.V.Sc. In terms of the overall assessment there will be 21 learners completing their degrees at the end of 2005, excluding the AIDP, which is a one year post-diploma certificate.

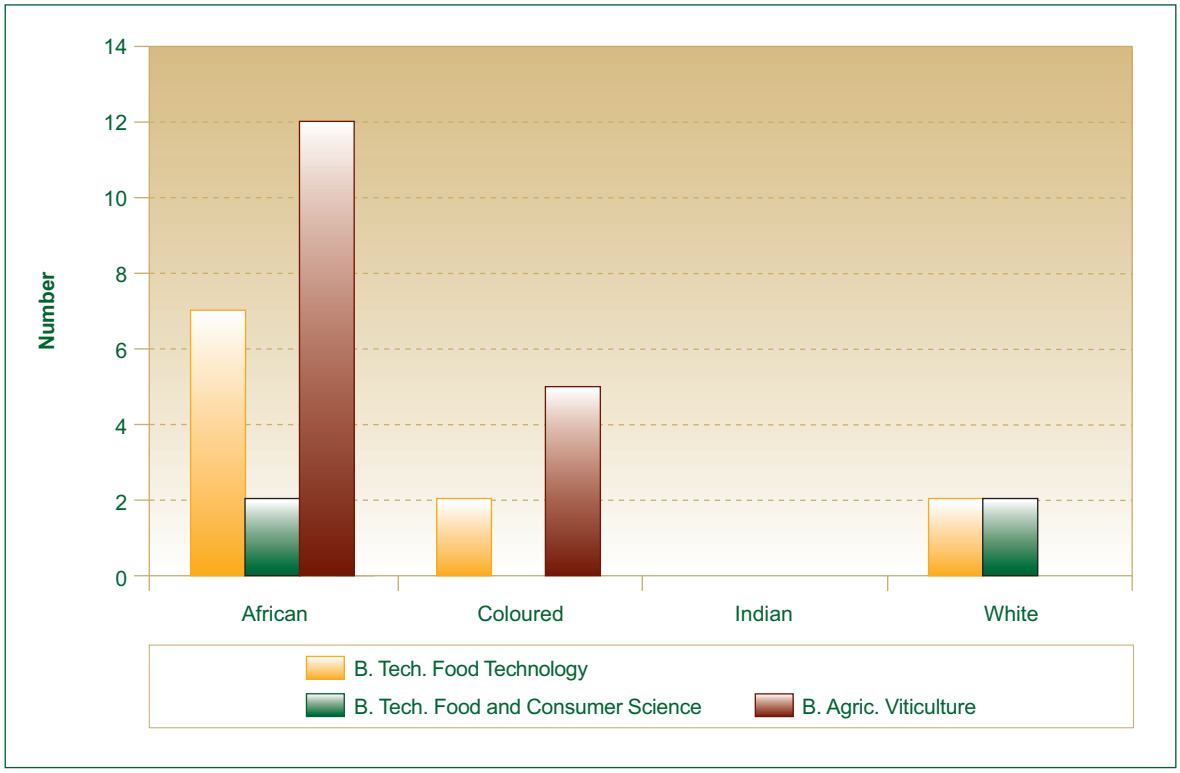


GRAPH 8. Registered postgraduate learners, N = 20



GRAPH 9. Learners registered for B.Sc. degrees, N = 69





GRAPH 10. Learners registered for B. Tech. degrees, N = 32

4.2 Overall number of bursary awards

4.2.1 An overall comprehensive breakdown of bursary awards

A total of 114 new bursaries were awarded to learners at higher education institutes, bringing the total number of learners who enrolled at higher education institutes, to 164. In total there are 199 learners benefiting from the bursary scheme. A detailed breakdown on the beneficiaries in terms of study field and race is presented in Graphs 5 to 8.

From Graph 8 a total of 20 postgraduate bursaries were awarded. All the beneficiaries were Africans.

From Graph 9 a total of 69 learners were registered for B.Sc. degrees. The majority of the learners (63%) are African. A total of 32 learners were registered for B. Tech. degrees. The majority of the learners registered are Africans 21 (65,6 %).

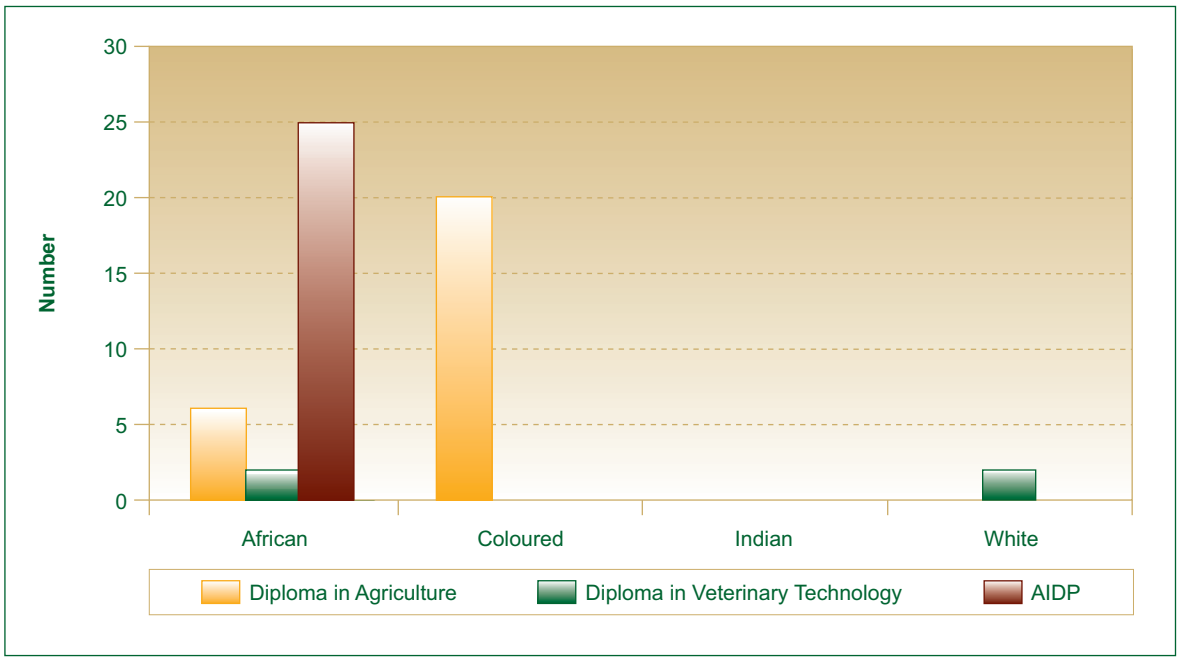
4.2.2 AIPD: Agricultural Industry Development Programme

Data in Graph 11 depict that a total of 37 learners were registered for various diploma programmes. In terms of racial breakdown, the majority of the beneficiaries are Africans (33 = 89,2 %). The overall majority of registered learners are females.

4.3 Overall projected expenditure

An estimation of the 2005 financial expenditure combining 2004 and 2005 beneficiaries is presented in Table 15.

Based on the estimated expenditure at the end of December 2005 it is evident that the available funds for 2006 will be R6 536 452. The latter figure is only adequate to maintain the current intake of learners assuming that those in their final year will complete their studies as planned.



GRAPH 11. Learners registered for Diploma and Advance Programmes, N = 37

TABLE 15. A projected financial expenditure by the end of December 2005

Revenue	Total (R)
Transfers to NAFSAS 2004	5 300 000
Transfers to NAFSAS 2005	5 300 000
Transfers to NAFSAS 2006	5 300 000
Total	15 900 000
Expenditure	
Unaudited expenditure for 2004	2 912 535
Projected expenditure 2005 per field of study	
Ph.D.	64 655
Masters	452 587
Hons	129 310
B.V.Sc.	1 521 587
B.Sc. Agric. Engineering	373 590
B. Tech. Engineering	150 084

Revenue	Total (R)
B.Sc. Viticulture	726 259
B.Sc. Food Science	137 113
B. Tech. Food Technology	244 462
B. Tech. Food and Consumer Science	160 241
Diploma in Agriculture	157 080
Diploma in Veterinary Technology	201 003
Agricultural Industrial Development	900 000
Grade 12	192 098
Grade 8	100 000
Grade 7	46 700
Estimated Expenditure 2005	6 532 877
Total Expenditure by December 2005	9 363 548
Net surplus to carry 2006 intake	6 536 452

5. CONCLUSION

In terms of academic performance the majority of bursary beneficiaries in higher and further education institutions passed their examinations at the end of 2004. There has been a substantial increase of the total number of beneficiaries at higher education institutions from 66 in 2004 to 114 in 2005. The latter is due to the postgraduate student intake, AIDP, B.Sc. Agric. Economics and B.Sc. Food Science.

The remaining challenge is to create study opportunities in other study areas, which are either scarce or critical for the sustainable growth of the agricultural sector. The latter will require extra funding and the mobilisation of resources from other sources such as the National Skills Fund, Umsobomvu, international and local donors.