

Profiling agricultural science teachers and other teaching profesionals at FET and HET Institutions MARCH 2008



agriculture

Department: Agriculture REPUBLIC OF SOUTH AFRICA

TABLE OF CONTENTS

EXECUT	IVE SUMMARY	4
STU	AIM STATES AND A STA	4
1.1	METHODOLOGY	4
1.2	KEY FINDINGS AND CONCLUSION	4
1.3	PROFILING ISSUES RELATED TO TEACHERS AT ACADEMIC SCHOOLS	5
1.4	PROFILING ISSUES RELATED TO TEACHERS IN AGRIC HIGH SCHOOLS	5
1.5	PROFILING ISSUES RELATED TO LECTURES AT AGRIC COLLEGES	5
1.6	PRIFILING ISSUES RELATED TO LECTURES AT OTHER FET COLLEGES	5
1.7	PROFILING ISSUES RELATED TO LECTURES AT HET INSTITUTIONS	6
1.	CHAPTER 1: INTRODUCTION	7
1.1	BACKGROUND	7
1.2	OBJECTIVES OF THE STUDY	8
1.3	METHODOLOGY ADOPTED	8
1.4	STRUCTURE OF THE REPORT	8
2.	CHAPTER 2: PROFILING OF AGRICULTURAL TEACHERS AT	
	SCHOOL LEVEL	9
2.1	MAINSTREAM ACADEMIC HIGH SCHOOLS	9
2.1.1	INTRODUCTION	10
2.1.2	PROFILING OF TEACHERS OFFERING AGRICULTURAL SCIENCES	10
2.2	AGRICULTURAL HIGH SCHOOLS	11
2.2.1	INTRODUCTION	11
2.2.2	METHODOLOGY APPLIED	12
2.2.3	RESPONSE RATE	13
2.2.4	PROFILING INFORMATION AND RESULTS	13-16
3.	CHAPTER 3: PROFILING OF AGRICULTURAL LECTURERS AT	
	FURTHER EDUCATION AND TRAINING (FET) LEVEL	17
3.1	AGRICULTURAL COLLEGES	17
3.1.1	INTRODUCTION	17
3.1.2	METHODOLOGY APPLIED	17



3.1.3	RESPONSE RATE	17
3.1.4	PROFILING INFORMATION AND RESULTS	17
3.2	OTHER FET COLLEGES	22
3.2.1	INTRODUCTION	23
3.2.2	METHODOLOGY APPLIED	23
3.2.3	RESPONSE RATE	23
3.2.4	PROFILING INFORMATION AND RESULTS	23
4.	CHAPTER 4: PROFILING OF AGRICULTURAL LECTURERS AT	
	HIGHER EDUCATION AND TRAINING (HET) LEVEL	27
4.1	INTRODUCTION	27
4.1.1	UNIVERSITIES OF TECHNOLOGY	27

4.1.1		27
4.1.2	UNIVERSITIES	29
4.2	METHODOLOGY APPLIED	30
4.1.3	RESPONSE RATE	30
4.1.4	PROFILING INFORMATION AND RESULTS	32
5.	CHAPTER 5.	37
5.1	CONCLUSIONS	39

6. ANNEXURES 40- 41

6.1 ANNEXURE A: INFORMATION COLLECTION TEMPLATE FOR AGRICULTURAL HIGH SCHOOLS

6.2 ANNEXURE B: INFORMATION COLLECTION TEMPLATE FOR AGRICULTURAL AND OTHER FET COLLEGES

EXECUTIVE SUMMARY

1.1 STUDY AIM

One of the goals of the AET Strategy is to ensure that AET provider institutions are accredited and resourced with the appropriate number of teachers and trainers and that the teaching corps is adequately qualified and skilled. As part of the Strategy a need was subsequently identified to address shortfalls related to the agricultural teaching corps through investment in teacher development and by means of support programmes.

Since the above indicated investment and support programmes towards upgrading the teaching corps should be needs based, this assignment (study) was commissioned with the aim and objective to profile agricultural science teachers at school level and agricultural lecturers and professionals at institutions of higher learning. The study results should provide a clear profile of the agricultural teaching cadre with specific focus on aspects such as their qualifications, experience, age and gender, etc.

1.2 METHODOLOGY

The methodology followed in undertaking the study included:

Document Review: Documents and reports of DoE and DoA were reviewed and interrogated for data and statistics

Interviews: Various officials within DoE and DoA as well as representatives of various provider groupings at the school, FET and HET levels were consulted.

Questionnaires: Questionnaires in the from of profiling templates were developed and administered to:

Schools questionnaire to 47 Agricultural High Schools (response rate of 75%)

FET questionnaire was distributed to all the 11 Agricultural Colleges and a further 14 FET Colleges (response rate of 90%)

HET questionnaire was distributed to 10 Universities and a further 6 Universities of Technology (response rate of 73%)

KEY FINDINGS AND CONCLUSIONS

2.1 PROFILING ISSUES RELATED TO TEACHERS AT ACADEMIC SCHOOLS

Whilst the necessary information required for undertaking a detailed profiling of teachers at academic schools were not forthcoming from the DoE EMIS database, the following important observations could nevertheless be made from the other information gathered:

2.1.1 Strengths

The small sample group (39 teachers) reflected a mature profile (with only 20% having had less than 5 years teaching experience)

2.1.2 Weaknesses:

A considerable proportion of teachers offering the subject Agricultural Science at mainstream academic schools do not have sufficient qualifications or training to competently deliver the subject (25% of the sample group were underqualified and it was projected that this figure could be as high as 40% for the country as a whole).

Few (if any) teachers have had practical agricultural experience and exposure (especially in a commercial environment). They thus lack practical knowledge and the context within which the subject is offered.

Teachers lack entrepreneurship knowledge and skills within an agricultural context and thus have shortfalls to teach farming as a business.

2.2 PROFILING ISSUES RELATED TO TEACHERS IN AGRICULTURAL HIGH SCHOOLS

The following key profiling observations are based on the responses received from the 32 Agricultural High Schools (106 teachers) that participated in the profiling survey.

Strengths:

Qualifications: The formal qualifications of the agricultural teacher corps in the agricultural high schools are relatively high when compared to the teaching fraternity in South Africa (with 60% of the group holding either degrees or post

degree qualifications).

Weakne sses:

Gender: Male lecturers are dominant with 80% of all posts occupied by males. This poor gender equity may send wrong messages to prospective female students interested in following an agricultural career.

Race: Agricultural high schools have made little progress towards attaining employment equity from a racial perspective with 69% of all lecturers falling in the white population group. White lecturers are particularly dominant in the Western Cape (100%) and Northern Cape (87%).

Experience: The overwhelming majority of lecturers have had no practical agricultural working experience (70%) and their knowledge of the subject is thus of an academic nature only. From a planning & development perspective opportunities must be created to expose them to practical farming practice in their fields of study.

2.3 PROFILING ISSUES RELATED TO LECTURERS AT AGRICULTURAL COLLEGES

The following key profiling observations are based on the responses received from the 10 Agricultural Colleges (174 lecturers) that participated in the profiling survey.

Strengths:

Qualifications: Lecturers are generally well qualified with 29% holding post graduate degrees and a further 44% having been qualified to degree level.

Race: Colleges have been able to attain employment equity from a racial perspective with 67% of all lecturers falling in the black population group. Black lecturers are particularly dominant in the North West and East Cape provinces where only black lecturers are employed (100%). In contrast the Northern Cape and KZN provinces still have a dominant white staffing profile with white lecturers respectively making up 90% and 66% of the lecturing complement.

Weaknesses:

Age: Generally speaking the lecturers are quite young (30% under the age of 30 years) and it raises a question regarding their ability to transfer knowledge and skills to the students. This becomes particularly evident when considering that 85% of all lecturers have had little or no practical commercial farming experience.

Race: From a planning /succession perspective it is important to note that linking race and agricultural experience data reflect that practical agricultural experience is primarily seated amongst white lecturers. Specific attention must thus be given to provide black lecturers with the opportunity to gain practical agricultural experience.

Experience: The overwhelming majority of lecturers (48%) have less than 3 years lecturing experience. This indicates a high turnover in staff which requires attention. Regarding practical agricultural experience the situation is bleak with many having now practical experience (50% falling in the category 0-3 years experience.)

Qualifications: Whilst lecturers are generally well qualified it must be noted that 24% of the lecturers only hold qualifications at a Diploma level and a further 3% at a Certificate level. Good academic practice prescribes that lecturers should only offer learning programmes (especially programmes leading up to qualifications) at a NQF level that is lower than their own qualifications. This implies that this group of lecturers should confine themselves to offering skills programmes of a NQF level 4 and lower.

2.4 PROFILING ISSUES RELATED TO LECTURERS AT OTHER FET COLLEGES

The following key profiling observations are based on the responses received from the 12 FET Colleges (40 lecturers) that participated in the profiling survey.

2.4.1 Strengths:

Race: It is evident that the FET colleges have been able to attain employment equity from a racial perspective with 75% of all lecturers falling in the black population group. Black lecturers fill all posts in 5 of the provinces. The only exception is the Western Cape where no posts are held by black lecturers.

2.4.2 Weaknesses:

Age: Generally speaking the lecturers are quite young (33% under the age of 30 years) and raises a question regarding their ability to transfer knowledge and skills to the students. This is especially true in the East Cape and Limpopo Provinces where respectively 66% and 60% of al lecturers are under the age of 30 years.

Gender: Male lecturers are dominant with 75% of all posts occupied by males. This is particularly evident in the Eastern Cape, Free State, Limpopo and Mpumalanga Provinces where 100% of the respondents were male.

Experience: Whilst 42% of the lecturers have 10 or more years teaching experience, the overwhelming majority of



lecturers have had little practical agricultural experience (35% have no experience). This is especially high in KZN where 73% of the lecturers have indicated that they have never worked in the farming sector prior to becoming lecturers.

Qualifications: At the FET Colleges only 47% of the lecturers hold degree and/or post degree qualifications (as opposed to 63% at the Agricultural Colleges). FET colleges further employ some lecturers with Certificate qualifications only (12%) and a further relatively large group (40%) only has a Diploma as highest qualification.

2.5 PROFILING ISSUES RELATED TO LECURERS AT HET INSTITUTIONS

The following key profiling observations are based on the responses received from the 14 HET Institutions (9 Universities and 5 Universities of Technology with a combined total of 405 lecturers) that participated in the profiling survey.

2.5.1Strengths:

Age: As can be expected (given that lecturers at HET institutions generally hold more than one post graduate qualification) they are as a rule older that lecturers at the other learning institutions and the majority fall in the age group 40-50 years (32%). A combination of the "age" and "experience in lecturing" data sets reveal that within this dominant age group of 40-50 years old, 65 per cent the lecturers had 10 or more years experience in lecturing agricultural programmes.

Experience: Lecturers at the HET institutions generally have good teaching experience with more than 50% indicating 10 or more lecturing experience. It was also surprising to note that 70% of the HET lecturers indicated at least 5 years experience of a practical nature in the agricultural sector.

2.5.2 Weaknesses:

Gender: Male lecturers are dominant with 68% of all lecturing posts occupied by males. Male dominance is particularly evident in the Eastern Cape (92%) and Free State (85%) provinces. It is proposed that the HET institutions in these two provinces give particular attention to this matter towards addressing employment equity targets and since it may send wrong messages to prospective female students interested in following an agricultural career.

Race: It is evident that the HET institutions have not yet been able to attain employment equity from a racial perspective with 75% of all lecturers belonging to the white population group. Attention is specifically drawn to the Western Cape (88%) and Free State (85%) provinces. A combination of the racial and qualification data sets reveal that this 25% representation is found at all levels of qualifications (i.e. from bachelor's degree level through to doctorate degree level). This suggests sufficient numbers of highly qualified black candidates with an interest to take up employment positions at institutions of higher education.

Qualifications: As could be expected the qualifications of HET staff are good and they are well qualified (58% hold Doctorate Degrees and 30% Masters Degrees).





CHAPTER 1: INTRODUCTION

BACKGROUND

The Department of Agriculture developed the Agricultural Education and Training (AET) Strategy in an attempt to improve agricultural production through the rendering of quality agricultural education and training services. Whilst there are various challenges that hinder the improvement of agricultural production, constraints in the provisioning of quality education and training has been identified as a critical issue to be addressed.

It is generally recognised that agricultural teachers and agricultural lecturers at schools and other higher institutions of learning are pivotal in rendering quality education and training. However, the current cadre of agricultural teachers and lecturers reflect a variety of shortfalls and weaknesses resulting in poor delivery. The following are examples of constraints experienced:

Most high schools offering agriculture as a subject are poorly equipped in terms of qualified teachers (and practical training equipment).

Teachers offering agricultural subjects (at both high schools and agricultural schools) are often inadequately trained – both in theory but especially in terms of practical farming experience

Few teachers have been trained to teach agriculture as a profit making subject (understanding of farming as a business).

There is a perception that there is a lack of interest amongst female teachers to offer agricultural subjects

As a result of the above challenges the image of agriculture as a career option (first choice option) is tarnished

It is one of the goals of the AET Strategy to ensure that AET is accredited and resourced with the appropriate number of teachers and trainers who are adequately qualified and skilled. As part of the Strategy a need was subsequently identified to address shortfalls related to the agricultural teaching corps through investment in teacher development and by means of support programmes.



OBJECTIVES OF THIS STUDY

Since the above indicated investment and support programmes towards upgrading the teaching corps should be needs based, this assignment (study) had as objective to profile agricultural science teachers at school level and agricultural lecturers and professionals at institutions of higher learning. The study results should provide a clear profile of the agricultural teaching cadre with specific focus on aspects such as their qualifications, experience, age and gender, etc.

This profiling will then provide a base for the planned government investment and guide the support programmes and other intended interventions. In this regard it is believed that the study results could provide guidance towards:

- The retraining of especially agricultural science teachers
- The design of new qualifications for those involved in the teaching of agriculture as a science
- Recruitment and selection criteria and guidelines for agricultural teachers and lecturers

METHODOLOGY ADOPTED

The methodology used in undertaking the assignment, taking into account the budgetary and time constraints, primarily consisted of a desk study and comprised the following:

1.3.1 DOCUMENT AND DATABASE REVIEW

A review was undertaken of existing documentation that could provide information relevant and useful to the study. In this regard the various databases of the Department of Education (e.g. EMIS) and reports on earlier studies undertaken by DoE and DoA would be interrogated and used in establishing data and statistics.

1.3.2 INTERVIEWS AND/OR FOCUS

GROUP MEETINGS

Interviews were held with selected key stakeholders and sources of information. In this regard relevant officials in the DoE were interviewed as well as the Chairpersons of representatives of various provider groupings at the School, FET and HET levels.

1.3.3 QUESTIONNAIRES

Questionnaires (in the form of profiling templates) were developed and administered to providers of agri-

cultural education and training service. In this regard a school questionnaire was distributed to each Agricultural High Schools (47 in total); a FET questionnaire was distributed to all the Agricultural Colleges (11 Colleges) and to a further 14 FET Colleges; a HET questionnaire was distributed to 10 Universities and a further 6 Universities of Technology.

The information obtained via the above data collection processes were subsequently collated and analysed to develop teacher and lecturer profiles. The Draft Profiling Report was then presented to the DoA and other key stakeholders for discussion, verification and inputs. These inputs were subsequently worked into the Final Reported.

STRUCTURE OF THE REPORT

The Report has been structured as follows:

- Chapter 1: Introduction
- Chapter 2: Profiling of Agricultural Teachers at School level
- General High Schools
- Agricultural High Schools

Chapter 3: Further Education and Training Colleges

- Agricultural Colleges
- Other FET Colleges
- Chapter 4: Higher Education and Training Institutions
- Universities of Technology
- Universities

Chapter 5: Conclusions

CHAPTER 2: PROFILING OF AGRICULTURAL TEACHERS AT SCHOOL LEVEL

This Chapter reflects on agricultural education and training provisioning at school level and subsequently the focus is on the profiling of agricultural teachers. Within this band we differentiate between provision at mainstream (academic) High Schools and at dedicated Agricultural Schools.

2.1 MAINSTREAM HIGH SCHOOLS

2.1.1 INTRODUCTION

A large number of mainstream (academic) high schools offer "Agricultural Science" as a subject choice up to the school leaving Senior Certificate Examination at Grade 12. Data provided by the Department of Education indicate that in 2003 a total of 1 097 schools offered Agricultural Science as a subject in the Senior Certificate Examinations. More recent statistics reflect that approximately 117 000 pupils enrolled for the subject Agricultural Science (Higher Grade, Standard Grade and Lower Grade) in 2006. Details of Agricultural Science enrolment figures for 2005 and 2006 are provided in Table 2.1 below:

]	ENROLLED F	OR HIGHER (GRADE	
Year	Enrolment	Passed HG	Passed SG	Total Passed	Total Failed
2005	24 008	7 490	8 852	16 342	7 958
2003	24 008	31%	37%	68%	32%
2006	06 31 128	5 987	9 773	15 760	15 366
2000	51 120	19%	32%	51%	49%
	E	NROLLED FO	R STANDARD	GRADE	
Year	Enrolment	Passed SG	Passed LG	Total Passed	Total Failed
2005	79 154	50 626	15 042	65 668	13 850
2005		64%	19%	83%	17%
2006	86 370	45 891	20 016	65 907	19 463
_300		53%	23%	77%	23%

Table 2.1: Agricultural Science enrolment figures in 2005/6

From the above statistics the following key observations can be made:

- Total enrolment for Agricultural Science as a subject for the Senior Certificate (Grade 12) amounted to 117 500 pupils in 2006.
- Exam results of these 117 500 pupils revealed the following:
 - Approximately 6 000 students passed at Higher Grade (HG)
 - Approximately 55 600 students passed at Standard Grade (SG)
 - Approximately 20 000 students passed at Lower Grade (LG)
 - Both the actual numbers and percentage pass rates at HG and SG were lower than in 2005 whilst the number
 - who passed at LG increased.
- The number of students who failed the exam increased substantially from 21% in 2005 to 30% in 2006.

It is important to note that Agricultural Science is a subject choice out of a minimum of six subjects in total and as such the character of the Senior Certificate qualification is generalist and formative rather than vocational.

However, following the National Curriculum Statement (NCS) for Grades 10-12 (General) in 2003, a decision was taken to develop curriculum for two further agricultural subjects (in addition to the existing Agricultural Science subject) – namely Agricultural Management Practices and Agricultural Technology. Learners enrolling for all three these subjects would shift from the general academic to the general vocational pathway. It should however be noted that few schools (other than the dedicated Agricultural Schools) have the resources and practical training facilities needed to facilitate a mastering of the operational skills required in the Agricultural Management Practices and Agricultural Technology subjects. As a result few mainstream schools have ventured to offer these additional subjects since its introduction in 2005 and it has largely been introduced at the Agricultural High Schools only.

2.1.2 PROFILE OF AGRICULTURAL TEACHERS IN SO-CALLED ACADEMIC HIGH SCHOOLS

Given the large number of schools offering Agricultural Science as a stand alone subject in many of the mainstream high schools, it was not possible to administer profiling questionnaires at all these schools (in excess of 100 000 pupils are enrolled for the subject nationally). Towards obtaining profiles of teacher offering the subject at mainstream schools the following methodology was subsequently adopted:

The Department of Education was requested to provide such information from their EMIS database.

At provincial level selected Deputy Chief Education Specialists and/or Learning Facilitators (for the subject Agricultural Science) was consulted to establish their views regarding the profile of teachers offering the subject in their respective provinces.

Review of relevant documents and publications

2.1.2.1 Results via the DoE EMIS Database

It must unfortunately be reported that the request for information from the DoE (via its EMIS database) has yielded no results. Whilst officials from the DoE initially indicated that the EMIS system could provide some of the information as requested from them, this was never provided despite various follow-up requests. Following one of the follow-up queries we were advised (2 weeks before the deadline for submission of the report) to approach the provincial FET Coordinators who could possibly assist with such information. Since a similar earlier request forwarded to a Provincial Coordinator did not yield results either it was realised that this approach (at such a late stage) would not be successful.

Given the resultant lack of statistical information re agricultural teacher profiles at academic schools, we were confined to relevant and related data from a limited teacher profiling survey undertaken by the Western Province DoE in 2003

2.2.2.2 Results via Provincial Inputs

The Western Cape Education Department of Education undertook a survey in 2003 to investigate problems experienced in offering Agricultural Science as a subject in their schools. This survey reflects that 35 schools in the Western Cape Province offer the subject with a teaching corps of 39 agricultural teachers. A profiling of the Grade 12 Teachers who provided information for the survey is as follows:

Formal Qualification	%	Years Teaching Experience	%
Grade 12 (no other training in Agriculture)	12%	0-5 years	20%
Grade 12 + 2 years Higher Cert. (Agric)	12%	6-10 years	48%
Grade 12 + 3 year Diploma (Agric)	52%	11-15 years	16%
Grade 12 + 4 year Diploma (Non-Agric)	8%	16-20 years	12%
Grade 12 + 4 year Degree (Agric)	16%	26-35 years	4%

From the above data the following observations are made:

- There are some teachers offering the subject Agricultural Science that are obviously not sufficiently trained for the task (especially the 12% of teachers that have had no training in agriculture and the further 12% teachers who only hold a 2 year Certificate)
- The majority of teachers seems to have received reasonably relevant education to prepare them for the subject (68% either have a 3 year agricultural diploma or a 4 year agricultural degree).
- The overwhelming majority of teachers (80%) have more than 5 years teaching experience.

Discussion with the Senior Curriculum Planner: Life Sciences in the Western Cape Education Department however revealed a large need to upgrade the agricultural teachers in the following fields:

- Very few teachers have had practical agricultural experience and exposure of a commercial nature. They thus lack practical knowledge and the context within which the subject is offered thus needing training in this regard.
- Teachers generally lack entrepreneurship knowledge and skills within an agricultural context and thus has short-falls to teach farming as a business

2.2 AGRICULTURAL HIGH SCHOOLS

2.2.1 INTRODUCTION

The National Agricultural Directory 2007 (published by the Department of Agriculture) lists forty four Agricultural High Schools that offer a learning programme up to Grade 12 (Senior Certificate level). Up to 2003 (when the new NCS was introduced), these schools all offered the same Agricultural Science (HG/SG) subject offered at ordinary academic high schools as well as five other agricultural subjects. To this end the majority of these schools had some form of agricultural facilities (or access to such facilities) where the practical training component of agriculture could be provided (whilst all schools did not have the facilities and capacity to offer the full range of agricultural subjects). Statistics for 2003 (Report by the DoA re Agricultural Graduate Outputs) indicated that a total of 548 learners were enrolled at the Agricultural High Schools and who took at least one agricultural subject. Table 2.3 below reflects such enrolment in 2003.

Table 2.3: Enrolment figures for Agricultural Subjects in Agricultural High Schools in 2003

	Agric ultur al Scien ce HG	Agricu ltural Science SG	Animal Husband ry HG	Animal Husband ry SG	Applied Agric Science SG	Farm Mechan ics SG	Field Husban dry HG	Field Husban dry SG	Practic al Agric Science SG
Enrolled	318	321	202	125	443	233	75	106	266
Passed	267	281	181	122	429	229	57	105	258
Total	4	548		is based on the first of the fi	1	2		•	0

Source: DoA Report on Agricultural Graduate Outputs

However, with the introduction of the National Curriculum Statement (NCS) in 2003, new subjects and curriculum within the Agricultural Studies Learning Field were introduced – namely Agricultural Sciences, Agricultural Management Practices and Agricultural Technology

2.2.2 METHODOLOGY APPLIED

Information supplied by the DoE (South African Agricultural Teaching Association) suggested that there are 49 Agricultural High Schools within the country. Given this number it was attempted to obtain detailed teacher profiling information from each school. To this end a Profiling Template (questionnaire) was distributed to each school (either via email or by fax). Please refer to Annexure A for an example of the Agricultural High School Profiling Template used. The information fields for which data was requested and collected are the following:

- The number of teachers offering agricultural subjects
- A racial and gender breakdown of teachers
- An age breakdown of teachers
- An indication of the qualifications that such teachers hold
- Experience in terms of the number of years offering the subject as well as the number of years practical agricultural experience

In addition to the above Profiling Template meetings were held with the Chairperson of SAATA (South African Agricultural Teaching Association) as well as the Deputy Chief Education Specialist (Agriculture) of the Free State Province.

2.2.3 RESPONSE RATE

During the undertaking of the assignment it was established that 6 of the schools (from the original DoE list of 49 Agricultural High Schools) no longer offer agriculture as a learning field – thus effectively leaving 43 agricultural high schools at present (March 2008). From the above total school complement information, (in the form of completed information templates), could only be obtained from 32 schools (despite extensive efforts from the consultants - which included 3 written requests, at least 3 phone calls per school and an effort to pressurise non-responding schools via the Chairperson of SAAT). This is nevertheless a 75% response rate which is deemed sufficient to provide an accurate and valid profile of the target group. These 32 schools employed a total of 106 teachers who teach agricultural subjects.



2.2.4 AGRICULTURAL HIGH SCHOOL PROFILING RESULTS

The key profiling related findings and results for teachers offering agricultural subjects at the Agricultural High Schools are as follows:

2.2.4.1 Age of Teachers

Table 2.4 below indicates the age breakdown of teachers offering agricultural subjects lecturers in the agricultural high schools.

Table 2.4: Age of Teachers in the Agricultural High Schools, March 2008

PROVINCES	AG	AGE OF TEACHERS PER PROVINCE (NUMBERS)										
AGE GROUP	20-30	31 - 40	41 – 50	51 - 55	56 - 60	61 - +	NO					
FREE STATE	4	3	5	5	1	1	19					
KZN	1	2	1	2	0	2	8					
MPUMALANGA	3	8	5	4	0	0	20					
LIMPOPO	1	7	7	1	0	0	16					
NORTH WEST	2	0	2	2	1	0	7					
NORTHERN CAPE	0	3	3	1	0	1	8					
WESTERN CAPE	0	1	7	3	2	3	16					
EASTERN CAPE	2	3	3	4	0	0	12					
TOTAL	13	27	33	22	4	7	106					
PROVINCES	PER	CENTAGE A	GE DISTR	IBUTION P	ER PROV	INCE	TOTAL					
AGE GROUP	20-30	31 - 40	41 – 50	51 – 55	56 - 60	61 - +	%					
FREE STATE	21.1	15.8	26.3	26.3	5.3	5.3	100					
KZN	12.5	25.0	12.5	25.0	0.0	25.0	100					
MPUMALANGA	15.0	40.0	25.0	20.0	0.0	0.0	100					
LIMPOPO	6.3	43.8	43.8	6.3	0.0	0.0	100					
NORTH WEST	28.6	0.0	28.6	28.6	14.3	0.0	100					
NORTHERN CAPE	0.0	37.5	37.5	12.5	0.0	12.5	100					
WESTERN CAPE	0.0	6.3	43.8	18.8	12.5	18.8	100					
EASTERN CAPE	18.2	18.2	27.3	36.4	0.0	0.0	100					
TOTAL	12.4	24.8	31.4	21.0	3.8	6.7	100					

From the information the following important age related observations are made:

Generally speaking the age of teachers in the agricultural high schools is relatively spread over the different age groups with the majority falling in the age band 30 to 50 years. An exception is the Western Cape where more than 30% of the teachers are older than 56 years of age and are thus nearing retirement age.

The fact that 37% of all the teachers are still under the age of 40 years (with a further 31% in the age group 41 -50 years), is positive from a teacher upgrading and development perspective. This is especially relevant in view of the considerable teacher upgrading that will be required to orientate the existing teaching corps to the new agricultural subjects and curriculum.

2.2.4.2 Gender of Teachers

Table 2.5 provides a gender breakdown of teachers in the Agricultural High Schools. From the information the following important gender related observations are made:

Male lecturers are dominant with 80% of all posts occupied by males.

It is proposed that the schools give attention to this matter towards addressing employment equity targets and since it may send wrong messages to prospective female students interested in following an agricultural career.

When gender and qualification data fields are integrated it is interesting to note that 62% of the female teachers hold degree or post degree qualifications (which is slightly higher than that of their male counterparts).

Table 2.5: Gender breakdown of teachers at the Agricultural High Schools, March 2008

PROVINCES	GENDER		TOTAL	ER (%)	TOTAL	
SEX	FEMALE	MALE	NO	FEMALE	MALE	%
FREE STATE	4	15	19	21.1	78.9	100
KZN	1	7	8	12.5	87.5	100
MPUMALANGA	3	17	20	15.0	85.0	100
LIMPOPO	9	7	16	56.3	43.8	100
NORTH WEST	1	6	7	14.3	85.7	100
NORTHERN CAPE	1	7	8	12.5	87.5	100
WESTERN CAPE	4	12	16	25.0	75.0	100
EASTERN CAPE	3	9	12	25.0	75.0	100
TOTAL	26	80	106	24.5	75.5	100

2.2.4.3 Racial Breakdown of Teachers

Table 2.6 provides a racial breakdown of teachers in the Agricultural High Schools. From the information the following important racial composition related observations are made:

- It is evident that the agricultural high schools have made little progress towards attaining employment equity from a racial perspective with 69% of all lecturers falling in the white population group. White lecturers are particularly dominant in the Western Cape (100%) and Northern Cape (87%). This issue demands urgent attention.
- A combination of the race and qualification data fields reveals that amongst the white teachers 63% hold either a degree or a post graduate qualification. Amongst the black teachers this percentage is 48% with the remainder (52%) holding a diploma qualification.
- Generally it can be concluded that the agricultural teachers are well qualified when compared to the teaching fraternity as a whole.

PROVINCES	RACE	ACE BREAKDOWN OF				RACE	BREA	KDOV	WN OF	TOTAL
	TEACH	ERS (NU	MBER)							
RACE	В	W	С	Ι	NO	В	W	С	Ι	%
FREE STATE	5	13	1	0	19	26.3	68.4	5.3	0.0	100
KZN	4	4	0	0	8	50.0	50.0	0.0	0.0	100
MPUMALANGA	9	11	0	0	20	45.0	55.0	0.0	0.0	100
LIMPOPO	7	9	0	0	16	43.8	56.3	0.0	0.0	100
NORTH WEST	2	4	0	1	7	28.6	57.1	0.0	14.3	100
NORTHERN CAPE	1	7	0	0	8	12.5	87.5	0.0	0.0	100
WESTERN CAPE	0	16	0	0	16	0.0	100.0	0.0	0.0	100
EASTERN CAPE	3	9	0	0	12	33.3	75.0	0.0	0.0	108
TOTAL	31	73	1	1	106	29.2	68.9	0.9	0.9	100

Table 2.6: Breakdown of Teachers in Agricultural High Schools per Race, March 2008.

2.2.4.4 Teaching Experience of Teachers

 Table 2.7 reflects the teaching experience of the teachers offering agricultural subjects at the Agricultural High Schools.

Table 2.7: Teaching experience of teachers at Agricultural High Schools, March 2008

PROVINCES	YEARS	EXPERI	ENCE		TOTAL	PERCEN	TAGE E	XPERIE	NCE '	FOTAL
NO YEARS	0 – 3	4 – 6	7 – 9	10 +	NO	0 – 3	4 - 6	7 – 9	10 +	%
FREE STATE	5	0	2	12	19	25.0	0.0	10.0	65.0	100
KZN	1	0	0	7	8	12.5	0.0	0.0	87.5	100
MPUMALANGA	6	2	0	12	20	30.0	10.0	0.0	60.0	100
LIMPOPO	3	5	0	8	16	18.8	31.3	0.0	50.0	100
NORTH WEST	2	0	0	5	7	28.6	0.0	0.0	71.4	100
NORTHERN CAPE	0	1	0	7	8	0.0	12.5	0.0	87.5	100
WESTERN CAPE	0	1	1	14	16	0.0	6.3	6.3	87.5	100
EASTERN CAPE	0	0	0	12	12	0.0	0.0	0.0	100.0	100
TOTAL	17	9	3	77	106	15.9	8.4	2.8	72.9	100

From the information it is evident that:

• It is an experienced teaching corps with 73% of the complement having more than 10 years experience in teaching. The Eastern Cape in particular boasts a very experienced group of teachers with all having more than 10 years experience.

2.2.4.5 Agricultural Experience of Teachers

Table 2.8 reflects the agricultural experience (practical work experience in the agricultural sector or as farmers) of the teachers in the Agricultural High Schools. This is deemed of special importance since practical experience enhances their first hand knowledge and understanding of agriculture and influences their ability to transfer practical knowledge and skills to learners.

From the information the following observations and conclusions can be made:

- The overwhelming majority of lecturers have had no practical agricultural working experience (70%) and their knowledge of the subject is thus of an academic nature only.
- There is however a group of teachers (22%) that have had 4 or more years practical farming experience (white teachers comprise 82% of this category).
- It should however be noted that in the Agricultural High Schools teachers are expected to facilitate and supervise the practical work of pupils on the school farms/production units and should thus have gained some practical experience and exposure.
- From a planning and development perspective specific opportunities and means need to be created for the large group of inexperienced teachers to expose them to practical farming practice in their respective fields of study.

PROVINCES	YEAF	RS EX	PER	IENC	E IN	TOTAL	PERC	ENTA	GE EX	PERIE	NCE IN	TOTAL
	A	AGRI	CULI	TURE				AGI	RICUL	TURE		
No YEARS	NONE	1	2	3	4 +	NO	NONE	1	2	3	4 +	%
FREE STATE	14	1	2	1	2	20	70.0	5.0	10.0	5.0	10.0	100
KZN	6	0	0	0	2	8	75.0	0.0	0.0	0.0	25.0	100
MPUMALANGA	8	1	1	0	10	20	40.0	5.0	5.0	0.0	50.0	100
LIMPOPO	11	0	0	0	5	16	68.8	0.0	0.0	0.0	31.3	100
NORTH WEST	6	0	0	0	1	7	85.7	0.0	0.0	0.0	14.3	100
NORTHERN CAPE	7	0	0	0	1	8	87.5	0.0	0.0	0.0	12.5	100
WESTERN CAPE	13	0	0	2	1	16	81.3	0.0	0.0	12.5	6.3	100
EASTERN CAPE	10	0	0	0	2	12	83.3	0.0	0.0	0.0	16.7	100
TOTAL	75	2	3	3	24	107	70.1	1.9	2.8	2.8	22.4	100

Table 2.8: Practical agricultural experience and exposure of teachers at Agricultural High Schools, March 2008

2.2.4.6 Qualifications of Teachers

Table 2.9 provides a breakdown of the qualifications held by teachers in the Agricultural High Schools.

From the information the following comments and conclusions can be made:

• It can generally be concluded that the formal qualifications of the agricultural teacher corps in the agricultural high schools are relatively high when compared to the teaching fraternity in South Africa (with 60% of the group holding either degrees or post degree qualifications).

PROVINCES	QUALIF	ICATIONS	OF TEACHE	% QUAL	% QUALIFICATIONS				
LEVEL	DIP	DEGREE	POST DEG	TOTAL	DIP	DEGREE	POST DEG	TOTAL	
FREE STATE	4	12	2	18	21.1	68.4	10.5	100.0	
KZN	3	3	1	7	37.5	37.5	12.5	100.0	
MPUMALANGA	7	8	1	16	31.8	59.1	4.5	100.0	
LIMPOPO	8	5	3	16	40.0	35.0	15.0	100.0	
NORTH WEST	3	4	2	9	25.0	50.0	25.0	100.0	
NORTHERN CAPE	2	6	2	10	20.0	60.0	20.0	100.0	
WESTERN CAPE	10	5	1	16	62.5	31.3	6.3	100.0	
EASTERN CAPE	5	6	2	13	50.0	28.6	14.3	100.0	
TOTAL	42	50	14	106	40.0	47.0	13.0	100.0	

2.2.4.7 Staff utilization in terms of Subjects Offered

It was also attempted to identify the allocation of teachers in terms of subjects offered. For this purpose the allocation was made in terms of the new subjects namely – Agricultural Management Practice (AMP), Agricultural Technology (AT) and Agricultural Science (AS). Table 2.19 reflects the allocation of teachers in terms of the above subject offering.

PROVINCES	NUMB	ER SUBJ	ECTS OF	FERED	TOTAL	% OF \$	SUBJE	CTS OF	FERED	TOTAL
SUBJECTS	AMP	AT	AS	Other	No	AMP	AT	AS	Other	No
FREE STATE	9	5	9	1	24	37.5	20.8	37.5	4.2	100.0
KZN	5	1	3	0	9	55.6	11.1	33.3	0.0	100.0
MPUMALANGA	14	4	4	1	23	60.9	17.4	17.4	4.3	100.0
LIMPOPO	10	2	8	0	20	50.0	10.0	40.0	0.0	100.0
NORTH WEST	5	3	2	0	10	50.0	30.0	20.0	0.0	100.0
NORTHERN CAPE	3	2	4	0	9	33.3	22.2	44.4	0.0	100.0
WESTERN CAPE	8	2	6	6	22	36.4	9.1	27.3	27.3	100.0
EASTERN CAPE	8	2	5	0	15	53.3	13.3	33.3	0.0	100.0
TOTAL	62	21	41	8	132	47.0	15.9	31.1	6.1	100.0

Table 2.6: Breakdown of Teachers in Agricultural High Schools per Race, March 2008.

From the above information the following can be observed and concluded:

• The majority of teachers (47%) is offering the subject Agricultural Management Practices

• A number of teachers offer more than one subject (20%) of the teachers.



CHAPTER 3: PROFILING AGRICULTURAL LECTURERS AT THE

AGRICULTURAL COLLEGES AND OTHER FET COLLEGES

This Chapter reflects on agricultural education and training provisioning at College (FET) level and within this band we differentiate between provision at the Agricultural Colleges and at the other Further Education and Training Colleges within the FET band.

3.1 AGRICULTURAL COLLEGES

3.1.1 INTRODUCTION

There are eleven Colleges of Agriculture located throughout the country. These institutions generally do not provide highly standardized programmes since they orientate their programmes and courses towards supporting agricultural activities that are practiced in the region where they are located. The programmes on offer subsequently also range from certificates of "intermediate skills" level (e.g. aimed at emerging farmers as target group) to graduate programmes located in the HET band (to N6 level usually offered through linkages with HET institutions). However, the curriculum in the Agricultural Colleges is primarily geared towards a student population that has completed the Grade 12 School leaving examination and who want to follow a career in agriculture. The Agricultural Colleges give specific focus and attention to the practical component of learning and curriculum generally comprise 60% theory and 40% practical training.

Statistics provided by the DoA (2006 Report by the DoA re Agricultural Graduate Outputs) indicated that the output from the Agricultural Colleges in 2004 amounted to 572 people who qualified with either a Higher Certificate (370 students) or a Diploma (202 students).

As indicated above, the courses on offer at the Agricultural Colleges are less standardised than in other FET Colleges and the variety (specialisation) of programmes are larger and generally more advanced.

3.1.2 METHODOLOGY APPLIED

Given that there are only 11 Agricultural Colleges in the country, it was decided to obtain detailed lecturer profiling information from each college. To this end a Profiling Template (questionnaire) was distributed to each college (either via email or by fax). Please refer to Annexure B for an example of the Agricultural College Profiling Template used. The information fields for which data was collected are the following:

The number of lecturers offering agricultural subjects

A racial and gender breakdown of such lecturers

An age breakdown of lecturers

An indication of the qualifications that such lecturers hold

Experience in terms of the number of years offering the subject as well as the number of years practical agricultural experience

3.1.3 RESPONSE RATE

As a result of extensive efforts to obtain cooperation from the colleges we are happy to report that 10 of the 11 Agricultural Colleges participated (only Owen Sithole College did not respond) and a 90% response rate could thus be obtained.

3.1.4 AGRICULTURAL COLLEGE PROFILING INFORMATION AND RESULTS

Based on the information obtained from the 10 responding Agricultural Colleges there are currently (March 2008) a total of 174 lecturers at these institutions offering agricultural programmes. The key profiling related findings and results for such lecturers are as follows:

3.1.4.1 Age of Lecturers

Table 3.1 below indicates the age breakdown of lecturers in the agricultural colleges. From the information the following important age related observations are made:

Generally speaking the age of lecturers in the agricultural colleges is quite young with 62% under the age of 40 years. This is especially true in the East Cape and Free State provinces where respectively 100% and 80% of all lecturers are under the age of 40 years.

Whilst the relatively young age profile holds advantages from a perspective that the majority of staff are not near retirement age, it raises a question regarding the experience that such staff has gained and if they can transfer practical experience to students (especially relevant since 30% of all lecturers are still under the age of 30 years). This becomes particularly evident when considered that 85% of all lecturers have had little or no practical agricultural experience within a commercial farming context.

PROVINCE	1	TOTAL					
AGE GROUP	20 - 30	31 - 40	41 – 50	51 - 55	56 - 60	61 - +	NO
NORTHERN CAPE	4	6	5	1	1	2	19
FREE STATE	6	2	2	0	0	0	10
KZN	2	4	1	1	1	0	9
MPUMALANGA	19	13	5	6	3	1	47
NORTH WEST	4	7	13	0	0	0	24
LIMPOPO	9	12	9	6	3	2	41
WESTERN CAPE	3	3	3	1	0	0	10
EASTERN CAPE	7	7	0	0	0	0	14
TOTAL	54	54	38	15	8	5	174
PROVINCE	PE	RCENTAGI	E AGE DIST	RIBUTION	PER PROV	INCE	TOTAL
AGE GROUP	20 - 30	31 - 40	41 – 50	51 – 55	56 - 60	61 - +	%
NORTHERN CAPE	21.1	31.6	26.3	5.3	5.3	10.5	100
FREE STATE	60.0	20.0	20.0	0.0	0.0	0.0	100
KZN	22.2	44.4	11.1	11.1	11.1	0.0	100
MPUMALANGA	40.4	27.7	10.6	12.8	6.4	2.1	100
NORTH WEST	16.7	29.2	54.2	0.0	0.0	0.0	100
LIMPOPO	22.0	29.3	22.0	14.6	7.3	4.9	100
WESTERN CAPE	30.0	30.0	30.0	10.0	0.0	0.0	100
EASTERN CAPE	50.0	50.0	0.0	0.0	0.0	0.0	100
TOTAL	31.0	31.0	21.8	8.6	4.6	2.9	100

Table 3.1: Age of Lecturers in the Agricultural Colleges, March 2008

3.1.4.2 Gender of Lecturers

Table 3.2 provides a gender breakdown of lecturers in the Agricultural Colleges. From the information the following important gender related observations are made:

Male lecturers are dominant with 75% of all posts occupied by males. This is particularly evident in the North West Province where all posts (100%) are filled by males.

It is proposed that the Colleges give particular attention to this matter towards addressing employment equity targets and since it may send wrong messages to prospective female students interested in following an agricultural career and further their agricultural studies at these institutions of learning. Table 3.2: Gender breakdown of lecturers at the Agricultural Colleges, March 2008

PROVINCE	GENDER I	NUMBER	TOTAL	GENDE	TOTAL	
GENDER	FEMALE	MALE	NO	FEMALE	MALE	%
NORTHERN CAPE	4	15	19	21.1	78.9	100
FREE STATE	2	8	10	20.0	80.0	100
KZN	2	7	9	22.2	77.8	100
MPUMALANGA	17	31	48	35.4	64.6	100
NORTH WEST	0	23	23	0.0	100.0	100
LIMPOPO	10	31	41	24.4	75.6	100
WESTERN CAPE	3	7	10	30.0	70.0	100
EASTERN CAPE	6	8	14	42.9	57.1	100
TOTAL	44	130	174	25.1	74.9	100

3.1.4.3 Racial Breakdown of Lecturers

Table 3.3 provides a racial breakdown of lecturers in the Agricultural Colleges. From the information the following important racial composition related observations are made:

- It is evident that the colleges have been able to attain employment equity from a racial perspective with 67% of all lecturers falling in the black population group. Black lecturers are particularly dominant in the North West and East Cape provinces where only black lecturers are employed (100%).
- In contrast the Northern Cape and KZN provinces still have a dominant white staffing profile with white lecturers respectively making up 90% and 66% of the lecturing complement. It is further noteworthy that no Indian lecturers are employed in any of the colleges.
- From a planning and succession perspective it is important to note that a linking of the race and agricultural experience data reflect that practical agricultural experience is primarily seated amongst white lecturers). Specific attention thus needs to be given to means of providing black lecturers with the opportunity to gain practical agricultural experience.

PROVINCE		E BREA			TOTAL	PI	CE	TOTAL		
RACE	B	W	С	Ι	NO	B W		C	Ι	%
NORTHERN CAPE	1	17	1	0	19	5.3	89.5	5.3	0.0	100
FREE STATE	8	2	0	0	10	80.0	20.0	0.0	0.0	100
KZN	3	6	0	0	9	33.3	66.7	0.0	0.0	100
MPUMALANGA	38	10	0	0	48	79.2	20.8	0.0	0.0	100
NORTH WEST	24	0	0	0	24	100.0	0.0	0.0	0.0	100
LIMPOPO	24	17	0	0	41	58.5	41.5	0.0	0.0	100
WESTERN CAPE	6	2	2	0	10	60.0	20.0	20.0	0.0	100
EASTERN CAPE	13	0	0	0	13	100.0	0.0	0.0	0.0	100
TOTAL	117	54	3	0	174	67.4	30.9	1.7	0.0	100

Table 3.3: Racial breakdown of lecturers at the Agricultural Colleges, March 2008

3.1.4.4 Teaching/Lecturing Experience of Instructional Staff

Table 3.4 reflects the lecturing (teaching) experience of the lecturers in the Agricultural Colleges.

Table 3.1: Age of Lecturers in the Agricultural Colleges, March 2008

PROVINCE	Ν	UMBEI	R OF Y	EARS	TOTAL	PERCEN	TAGE E	XPEREI	NCE IN	TOTAL
	EXPE	EXPERIENCE IN TEACHING								
EXPERIENCE	0–3	4–6	7–9	10 +	NO	0–3	4–6	7–9	10 +	%
NORTHERN CAPE	7	0	0	12	19	36.8	0.0	0.0	63.2	100
FREE STATE	8	1	0	1	10	80.0	10.0	0.0	10.0	100
KZN	2	3	1	3	9	22.2	33.3	11.1	33.3	100
MPUMALANGA	26	2	2	17	47	55.3	4.3	4.3	36.2	100
NORTH WEST	14	3	3	4	24	58.3	12.5	12.5	16.7	100
LIMPOPO	11	4	7	19	41	26.8	9.8	17.1	46.3	100
WESTERN CAPE	5	1	1	3	10	50.0	10.0	10.0	30.0	100
EASTERN CAPE	11	3	0	0	14	78.6	21.4	0.0	0.0	100
TOTAL	84	17	14	59	174	48.3	9.8	8.0	33.9	100

From the information the following important experience related observations are made:

- The overwhelming majority of lecturers have less than 3 years experience (48%). This indicates a high turnover in staff which could either be due to unsatisfactory working conditions or a high demand for people with such skills and experience in the sector (attractive alternative positions that enhances employment mobility). This is particularly true for the East Cape Province where 78% of the lecturers have less than three years teaching experience and none has more than 6 years experience. It is important that the reasons for such turnover is established and addressed towards ensuring an experienced teaching corps which is one of the requirements for high quality education and training service delivery.
- In contrast it is noted that in certain provinces (e.g. Northern Cape and Limpopo) there is considerable experience amongst the lecturing corps with 63% and 46% of the staff having 10 years and more experience.

3.1.4.5 Agricultural Experience of Lecturing Staff

Table 3.5 reflects the agricultural experience (practical work experience in the agricultural sector or as farmers) of the lecturers in the Agricultural Colleges. This is deemed of special importance since practical experience enhances their first hand knowledge and understanding of agriculture and influences their ability to transfer practical knowledge and skills to learners.

PROVINCE	-				TOTAL	PERCEN	-			FOTAL
		PERIEN		,	PRACTICAL AGRICULTURE					
EXPERIENCE	0-3	4-6	7-9	10 +	NO	0-3	4-6	7-9	10 +	%
NORTHERN CAPE	9	2	1	7	19	47.4	10.5	5.3	36.8	100
FREE STATE	5	2	1	2	10	50.0	20.0	10.0	20.0	100
KZN	4	2	0	3	9	44.4	22.2	0.0	33.3	100
MPUMALANGA	28	5	2	12	47	59.6	10.6	4.3	25.5	100
NORTH WEST	5	4	4	11	24	20.8	16.7	16.7	45.8	100
LIMPOPO	20	6	5	10	41	48.8	14.6	12.2	24.4	100
WESTERN CAPE	7	1	0	2	10	70.0	10.0	0.0	20.0	100
EASTERN CAPE	7	5	2	0	14	50.0	35.7	14.3	0.0	100
TOTAL	85	27	15	47	174	48.9	15.5	8.6	27.0	100

Table 3.1: Age of Lecturers in the Agricultural Colleges, March 2008

From the above information the following observations and conclusions can be made:

- The overwhelming majority of lecturers have had very little practical agricultural experience (many have no experience with half of the lecturers having had less than 3 years practical experience). This confirms observations made during the study that many lecturers are appointed directly from the best performing (academic) students who have qualified at the college. Apart from the fact that this practice leads to so-called academic "in-breeding", it establishes a teaching corps with book knowledge only whilst agriculture is essentially a practical science.
- A combination of the race and agricultural experience data sets reflect that practical farming experience amongst the white lecturers are high (53% of the group with 10 or more years practical farming experience are white lecturers and they also comprise 40% of the group with 7-9 years farming experience).

• From a planning and development perspective specific opportunities and means need to be afforded to the large group of young lecturers to be exposed to practical farming practice in their respective fields of study.

3.1.4.6 Qualifications of Lecturing Staff

Table 3.6 provides a breakdown of the qualifications held by lecturers in the Agricultural Colleges.

Table 3.6: Qualifications profile of lecturers at Agricultural Colleges, March 2008

PROVINCE	QUALI	FICATI	ONS OF		RERS	% QUAI	LIFICAT	TIONS D		TION
QUALIFICATION	CERT	DIP	DEG	POST DEG	TOTAL	CERT	DIP	DEG	POST DEG	TOTAL
NORTHERN CAPE	1	4	4	10	19	5.3	21.1	21.1	52.6	100.0
FREE STATE	0	1	5	4	10	0.0	10.0	50.0	40.0	100.0
KZN	1	1	7	0	9	11.1	11.1	77.8	0.0	100.0
MPUMALANGA	0	11	25	9	45	0.0	24.45	55.56	20.0	100.0
NORTH WEST	0	3	16	5	23	0.0	12.5	66.7	20.8	100.0
LIMPOPO	2	17	10	13	42	4.76	40.48	23.8	30.96	100.0
WESTERN CAPE	0	5	5	1	11	0.0	45.5	45.5	9.1	100.0
EASTERN CAPE	0	0	6	8	14	0.0	0.0	42.9	57.1	100.0
TOTAL	4	42	78	50	174	2.8	23.9	44.3	29.0	100.0

From the information the following important qualifications related observations are made:

- Lecturers are generally well qualified with 29% holding post graduate degrees and a further 44% having been qualified to degree level.
- It must however also be noted that 24% of the lecturers only hold qualifications at a Diploma level and a further 3% at a Certificate level. Good academic practice prescribes that lecturers should only offer learning programmes (especially programmes leading up to qualifications) at a NQF level that is lower than their own qualifications. This implies that this group of lecturers should confine themselves to offering skills programmes of a NQF level 4 and lower.

3.1.4.7 Staff utilization in terms of Subjects Offered

It was also attempted to identify the allocation of lecturers in terms of subjects offered. For this purpose the various courses offered by the Agricultural Colleges (which as indicated earlier are quite varied and focussed on their local environment and resultant agricultural opportunities) were grouped into the following categories – plant production, animal production, agricultural management, agricultural engineering and environment related programmes. Table 3.7 reflects the allocation of lecturers in terms of subject offering.

PROVINCE	NUN	MBER OF L	ECTURERS	OFFERING S	UBJECTS	TOTAL
SUBJECTS	PLANT	ANIMAL	AGRI ENG	AGRI MAN	ENVIRONMENT	NO
NORTHERN CAPE	1	11	3	3	1	19
FREE STATE	2	3	1	3	1	10
KZN	3	1	2	2	1	9
MPUMALANGA	20	7	7	14	0	48
NORTH WEST	9	7	2	6	0	24
LIMPOPO	11	11	9	6	3	40
WESTERN CAPE	3	2	2	3	0	10
EASTERN CAPE	8	2	1	3	0	14
TOTAL	57	44	27	40	6	174

Table 3.7: Lecturer utilisation in terms of subject offering, March 2008

PROVINCE		URER ALI SUBJECT (TOTAL		
SUBJECTS	PLANT	ANIMAL	AGRI ENG	AGRI MAN	ENVIRONMENT	NO
NORTHERN CAPE	5.3	57.9	15.8	15.8	5.3	100
FREE STATE	20.0	10.0	30.0	30.0	10.0	100
KZN	33.3	11.1	22.2	22.2	11.1	100
MPUMALANGA	41.7	14.6	14.6	29.2	0.0	100
NORTH WEST	37.5	29.2	8.3	25.0	0.0	100
LIMPOPO	27.5	27.5	22.5	15.0	7.5	100
WESTERN CAPE	20.0	20.0	30.0	30.0	0.0	100
EASTERN CAPE	57.1	14.3	7.1	21.4	0.0	100
TOTAL	25.3	25.3	23.0	23.0	3.4	100

From the above data it is evident that there is a fairly even allocation of lecturing resources to the four main subject fields. No particular peculiarities were identified in terms of specific needs or shortfalls from a subject allocation perspective.

3.2 OTHER FET COLLEGES

3.2.1 INTRODUCTION

There are 50 Further Education and Training (FET) Colleges in South Africa – of which a total of 13 Colleges currently offer agricultural programmes. The curricula offered at FET Colleges are vocational in nature and extends from the FET band into the HET band (N1 to N6). Curriculum is nationally specified and the same programme (content) is thus found in all the FET Colleges. The semester based structure of instructional offerings provided at the FET Colleges implies that students do not have to enrol for a whole qualification but can (on an intermittent basis) enrol for semester instructional offerings in accordance with their needs and circumstances.

The four main streams in the agricultural curriculum structure at the FET band (N1-N3 or NQF levels 2, 3 and 4) are:

- Courses related to farming as a business
- Courses dealing with farming mechanics
- Courses focussed on crop production
- Courses focussed on animal production

In the phase N4 – N6 the focus is more on management issues and courses fall into the following fields:

- Farming management
- Financial management
- Data management
- Maintenance management
- Human resources management

3.2.2 METHODOLOGY APPLIED

Information obtained from the Association of FET Colleges indicated that 15 FET Colleges offered agricultural programmes. During the investigation it was established that two colleges no longer offer such programmes – thus leaving 13 colleges. Given this relatively small number it was decided to obtain detailed lecturer profiling information from each institution. To this end a Profiling Template (questionnaire) was distributed to each FET College (either via email or by fax). The information fields for which data was collected are similar to that obtained for the Agricultural Colleges as outlined in 3.1.2 above.

3.2.3 RESPONSE RATE

All institutions included in the survey were followed up extensively via telephone calls and follow-up emails and it can be reported that 12 of the 13 FET Colleges offering agricultural programmes responded (which is a 92 per cent response rate). This response rate is more than sufficient to provide an accurate and valid profile of the target group.

3.2.4 FET COLLEGE PROFILING INFORMATION AND RESULTS

Based on the information obtained from the 12 responding Agricultural Colleges there are currently (March 2008) a total of 40 lecturers at these institutions offering agricultural programmes. The key profiling related findings and results for such lecturers are as follows:

3.2.4.1 Age of Lecturers

Table 3.8 below indicates the age breakdown of lecturers in the FET Colleges. From the information the following important age related observations are made:

- Generally speaking the age of lecturers in the FET colleges is quite young with 33% under the age of 30 years. This is especially true in the East Cape and Limpopo State provinces where respectively 66% and 60% of all lecturers are under the age of 30 years.
- Whilst the relatively young age profile holds advantages from a perspective that the majority of staff are not near retirement age, it raises a question regarding the experience that such staff has gained and if they can transfer practical experience to students. This becomes particularly evident when considered that 35% of all lecturers have indicated that they had no practical agricultural experience and a further 13% had less than 1 year experience.

PROVINCES	AG	E OF LECT	URERS PE	R PROVINC	CE (YEARS)		TOTAL
AGE	20 - 30	31 - 40	41 - 50	51 – 55	56 - 60	61 - +	NO
KZN	8	0	2	0	1	0	11
MPUMALANGA	0	1	3	0	0	0	4
LIMPOPO	3	2	0	0	0	0	5
WESTERN CAPE	0	2	3	2	0	2	9
FREE STATE	0	0	3	3	0	0	6
NORTH WEST	0	2	0	0	0	0	2
EASTERN CAPE	2	0	0	1	0	0	3
TOTAL	13	7	11	6	1	2	40

Table 3.7: Lecturer utilisation in terms of subject offering, March 2008

PROVINCES		PERCENT	AGE OF A	GE PER PRO	OVINCE		TOTAL
AGE	20 - 30	31 - 40	41 - 50	51 – 55	56 - 60	61 - +	%
KZN	72.7	0.0	18.2	0.0	9.1	0.0	100
MPUMALANGA	0.0	25.0	75.0	0.0	0.0	0.0	100
LIMPOPO	60.0	40.0	0.0	0.0	0.0	0.0	100
WESTERN CAPE	0.0	22.2	33.3	22.2	0.0	22.2	100
FREE STATE	0.0	0.0	50.0	50.0	0.0	0.0	100
NORTH WEST	0.0	100.0	0.0	0.0	0.0	0.0	100
EATERN CAPE	66.7	0.0	0.0	33.3	0.0	0.0	100
TOTAL	32.5	17.5	27.5	15.0	2.5	5.0	100

3.2.4.2 Gender of Lecturers

Table 3.9 below provides a gender breakdown of lecturers in the FET Colleges. From the information the following important gender related observations are made:

Male lecturers are dominant with 75% of all posts occupied by males. This is particularly evident in four of the province where all posts (100%) are filled by males.

It is proposed that the Colleges give particular attention to this matter towards addressing employment equity targets and since it may send wrong messages to prospective female students interested in following an agricultural career and further their agricultural studies at these institutions of learning.

Table 3.9: Gender breakdown of lecturers at the FET Colleges, March 2008

PROVINCE	GENDER N	NUMBER	TOTAL	GENDI	ER (%)	TOTAL
GENDER	FEMALE	MALE	NO	FEMALE	MALE	%
KZN	5	6	11	45.5	54.5	100
MPUMALANGA	0	4	4	0.0	100.0	100
LIMPOPO	0	5	5	0.0	100.0	100
WESTERN CAPE	4	5	9	44.4.	55.6	100
		6	6	0.0	100.0	
FREE STATE	0	1	2	50.0	50.0	100
NORTH WEST	1	3	3	0.0	100.0	100
EASTERN CAPE	0	-				100
TOTAL	10	30	40	25.0	75.0	100

3.2.4.3 Racial Breakdown of Lecturers

Table 3.10 provides a racial breakdown of lecturers in the FET Colleges. From the information the following important racial composition related observations are made:

- It is evident that the colleges have been able to attain employment equity from a racial perspective with 75% of all lecturers falling in the black population group. In five provinces the total complement is made up of black lecturers (100%) with the Free State (83%) and the Western Cape (0%) the only exceptions.
- Attention is drawn to the fact that the Western Province does not have any black lecturers and it is recommended that urgent action be taken to establish better employment equity.

PROVINCES	RACE BREAKDOWN (NUMBERS)					PERCENT	PERCENTAGE BREAKDOWN				
RACE	В	W	С	Ι	NO	В	W	С	I	%	
KZN	11	0	0	0	11	100.0	0.0	0.0	0.0	100	
MPUMALANGA	4	0	0	0	4	100.0	0.0	0.0	0.0	100	
LIMPOPO	5	0	0	0	5	100.0	0.0	0.0	0.0	100	
WESTERN CAPE	0	8	1	0	9	0.0	88.9	11.1	0.0	100	
FREE STATE	5	1	0	0	6	83.3	16.7	0.0	0.0	100	
NORTH WEST	2	0	0	0	2	100.0	0.0	0.0	0.0	100	
EASTERN CAPE	3	0	0	0	3	100.0	0.0	0.0	0.0	100	
TOTAL	30	9	1	0	40	75.0	22.5	2.5	0.0	100	

Table 3.10: Racial breakdown of lecturers at the FET Colleges, March 2008

3.2.4.4 Teaching/Lecturing Experience of Instructional Staff

Table 3.11 reflects the lecturing (teaching) experience of the agricultural lecturers in the FET Colleges.

Table 3.11: Years teaching experience of lecturers at FET Colleges, March 2008

PROVINCES	E X P E R LECTUR				PERCENTAGE EXPERIENCE TOTAL OF LECTURERS						
YEARS	0 – 3	4 - 6	7 – 9	10 +	NO	0 – 3	4 - 6	7-9	10 +	%	
KZN	6	4	0	1	11	54.5	36.4	0.0	9.1	100	
MPUMALANGA	0	0	0	4	4	0.0	0.0	0.0	100.0	100	
LIMPOPO	2	3	0	0	5	40.0	60.0	0.0	0.0	100	
WESTERN CAPE	1	1	1	6	9	11.1	11.1	11.1	66.7	100	
FREE STATE	0	1	0	5	6	0.0	16.7	0.0	83.3	100	
NORTH WEST	0	2	0	0	2	0.0	100.0	0.0	0.0	100	
EATERN CAPE	1	1	0	1	3	33.3	33.3	0.0	33.3	100	
TOTAL	10	12	1	17	40	25.0	30.0	2.5	42.5	100	



From the information the following important experience related observations are made:

- The overwhelming majority of lecturers have 10 years or more experience (42%). This indicates a relative experienced and stable teaching corps. Selected provinces (such as KZN) however have an inexperienced teaching complement with more than 50% having less than 3 years experience.
- A combination of this relative inexperience in KZN together with their youthfull profile (more than 70% under the age of 30 years) raises some concern regarding their ability to transfer knowledge and skills to learners and may indicate a need for specialist programmes that will enhance their skill and expertise levels.

3.2.4.5 Agricultural Experience of Lecturing Staff

Table 3.12 reflects the practical agricultural experience of the agricultural lecturers in the FET Colleges. From the information the following key observations and conclusions are made:

- The overwhelming majority of lecturers have had very little practical agricultural experience as many as 35% have no experience in agriculture. This confirms observations made during the study that many lecturers are appointed directly from the best performing (academic) students who have qualified at the college. Apart from the fact that this practice leads to so-called academic "in-breeding", it establishes a teaching corps with book knowledge only whilst agriculture is essentially a practical science.
- From a provincial perspective this lack of practical agricultural experience is especially high in KZN colleges where 73% of all lecturers indicated that they have never worked in the farming sector prior to becoming lecturers (this is incidentally the same group of lecturers who are under the age of 30 years).
- A combination of the race and agricultural experience data sets reflects that this problem of limited agricultural experience is prevalent amongst both the balck and white lecturers.
- From a planning and development perspective specific opportunities and means need to be created for the large group of young lecturers to be exposed to practical farming practice in their respective fields of study.

	AGRIC	EX	PERIE	NCE	OF		PERCE	NTAGE	E EXP	ERIENC	CE OF	
PROVINCES	LECTU	RER	S (YEA	RS)		TOTAL	OTAL LECTURERS					TOTAL
YEARS	None	1	2	3	4+	NO	None	1	2	3	4 +	%
KZN	8	0	2	0	1	11	72.7	0.0	18.2	0.0	9.1	100
MPUMALANGA	0	0	0	0	4	4	0.0	0.0	0.0	0.0	100.0	100
LIMPOPO	1	2	2	0	0	5	20.0	40.0	40.0	0.0	0.0	100
WESTERN CAPE	4	1	1	0	3	9	44.4	11.1	11.1	0.0	33.3	100
FREE STATE	0	0	6	0	0	6	0.0	0.0	100.0	0.0	0.0	100
NORTH WEST	0	2	0	0	0	2	0.0	100.0	0.0	0.0	0.0	100
EATERN CAPE	1	0	1	1	0	3	33.3		33.3	33.3	0.0	100
TOTAL	14	5	12	1	8	40	35	12.5	30.0	2.5	20.0	100

Table 3.12: Years practical agricultural experience lecturers at FET Colleges, March 2008

3.2.4.6 Qualifications of Lecturing Staff

Table 3.13 provides a breakdown of the qualifications held by lecturers in the FET Colleges. From the information the following observations and remarks are made:

- It is interesting to note that the qualifications of lecturers at the FET Colleges are lower than those employed by the Agricultural Colleges. At the FET Colleges only 47% of the lecturers hold degree and/or post degree qualifications (as opposed to 63% at the Agricultural Colleges)
- FET colleges employ some lecturers with Certificate qualifications only (12%) and a rfurther relatively large group (40%) only has a Diploma as highest qualification. This could be a cause of concern should such staff offer learning programmes at a NQF level 4 or higher.

PROVINCES		(QUALIFIC LECT	ATIONS C URERS)F	% QUALIFICATIONS					
QUALIFICATIONS	CERT	DIP	DEGREE	POST DEGREE	TOTAL	CERT	DIP	DEGREE	POST DEGREE	TOTAL	
KZN	1	7	2	1	11	9.1	63.6	18.2	9.1	100.0	
MPUMALANGA	0	1	1	2	4	0.0	25.0	25.0	50.0	100.0	
LIMPOPO	0	3	1	1	5	0.0	60.0	20.0	20.0	100.0	
WESTERN CAPE	0	4	5	0	9	0.0	44.4	55.6	0.0	100.0	
FREE STATE	2	1	2	1	6	33.3	16.7	33.3	16.7	100.0	
NORTH WEST	1	0	1	0	2	50.0	0.0	50.0	0.0	100.0	
EATERN CAPE	1	0	1	1	3	33.3	0.0	33.3	33.3	100.0	
TOTAL	5	16	13	6	40	12.5	40.0	32.5	15.0	100.0	

3.2.4.7 Staff utilization in terms of Subjects Offered

It was also attempted to identify the allocation of lecturers in terms of subjects offered. For this purpose the various courses offered by the FET Colleges (which as indicated earlier are quite varied and focussed on their local environment and resultant agricultural opportunities) were grouped into the following categories – crop production, animal production, farm businesses planning, farm mechanisation. Table 3.14 reflects the allocation of lecturers in terms of subject offering.

PROVINCES	NUMBER	R SUBJI	ECTS OI	FFERED	TOTAL	% OF SU	BJECT	S OFF	ERED	TOTAL
SUBJECTS	ANIMAL	CROP	FBP	FMECH	No	ANIMAL	CROP	FBP	FMECH	No
KZN	3	6	3	0	12	25.0	50.0	25.0	0.0	100.0
MPUMALANGA	1	3	0	0	4	25.0	75.0	0.0	0.0	100.0
LIMPOPO	2	1	0	0	3	66.7	33.3	0.0	0.0	100.0
WESTERN CAPE	0	5	6	0	11	0.0	45.5	54.5	0.0	100.0
FREE STATE	2	3	1	0	6	33.3	50.0	16.7	0.0	100.0
NORTH WEST	2	2	2	0	6	33.3	33.3	33.3	0.0	100.0
EATERN CAPE	1	2	0	0	3	33.3	66.7	0.0	0.0	100.0
TOTAL	11	22	12	0	45	24.4	48.9	26.7	0.0	100.0



CHAPTER 4: PROFILING AGRICULTURAL LECTURERS AT THE HIGHER EDUCATION

AND TRAINING LEVEL

4.1 INTRODUCTION

This Chapter reflects on agricultural education and training provisioning at the Higher Education and Training (HET) level. Within this band it is possible to differentiate between provisioning at the Universities and the Universities of Technology. However, the recent institutional merger amongst higher education entities and the resultant cooperation and joint venture arrangements amongst a number of the Universities and Universities of Technology have clouded the boundaries between these institutions and make a case for considering these institutions in an integrated manner.

As a point of departure the HET Institutions (in contrast to the Colleges of Agriculture and the FET Colleges) offer a wide range and variety of programmes that present multiple ways of acquiring a similar qualification level. It is thus evident and logical that each institution can not offer the full range of courses and the HET institutions subsequently tend to concentrate (and specialise) in selected areas of the broad agricultural field.

4.1.1 UNIVERSITIES OF TECHNOLOGY - PROGAMME OFFERINGS

The Universities of Technology traditionally focussed on NDip and HDip and BTech programmes. These institutions offer a variety of programmes within a single qualification. These programmes are not necessary unique – since they consist of a core of common fundamental courses but offer a further selection of courses to the specific individual need and requirements of the student. At the Diploma level the two programmes offered across the largest number of institutions are Agricultural management and nature Conservation. At the BTech level the above emphasis is repeated with 5 institutions offering these programmes.

Table 4.1 below reflects the range of agricultural programmes on offer at the various Universities of Technology.

Table 3.12: Years	practical agricultural	experience lecturers at FET	Colleges, March 2008

Programmes	C a p e Peninsul ar Universi ty of Technol ogy	Centr a l Univer sity O f Techn ology	Nelson Mandel a Metrop olitan Univers ity	Mangos uthu Technik on	Tshw ane Unive rsity Of Techn ology	UNISA (Forme r Techni k o n SA)
Introductory and Bridging						
Foundation Programme: Agriculture		Х				
NHDip programmes						
NHDip Agriculture Pig Production Managemnt					Х	
NHDip Poultry Production Management					Х	
NDip programmes						
NDip Agriculture				Х		
NDip Agricultural Animal Production	Х			Х		
NDip Agricultural Crop Production	Х			Х		
NDip Agricultural Management	Х	Х	х			
NDip Community Extension						
NDip Fisheries Resource Management	Х			Х		
NDip Forestry			Х			
NDip Game Ranch Management			Х			
NDip Nature Conservation	х		Х	Х		
BTech programmes						
3Tech Agricultural Management	Х	Х	Х		Х	Х
3Tech Agriculture Animal Production					Х	
3Tech Agriculture Crop Production					Х	
3Tech Agriculture Equine Science					Х	
3Tech Agriculture Mixed Farming					Х	
3Tech Agriculture Rural Dev & Extension					Х	
3 Tech Ecotourism Management					Х	
3Tech Forestry			Х			
3Tech Game Ranch Management					Х	
3Tech Nature Conservation	Х		Х		Х	
MTech programmes						
MTech Agricultural Management	Х	Х	Х			
MTech Ecotourism Management					Х	
MTech Forestry	1		Х			
MTech Game Ranch Management	1				Х	
MTech Nature Conservation	Х		Х			
Dtech						
DTech Agriculture						
DTech Agricultural Management	Î.		Х			
DTech Forestry	Î.		Х			
DTech Nature Conservation	1		Х		Х	

28

Source: DoA Report on the 10 Year HRD on Agricultural Graduate Output in SAQA accredited HET Institutions, 2006

4.1.2 UNIVERSITIES – PROGRAMME OFFERINGS

At Universities the majority of programmes offered are at Bachelor's level and primarily located within the Science domain – whilst the degree programmes are offered from different disciplinary bases (BAgric, BInst, BSc, BCom). Whilst some Universities offer general programmes, other favour a form of specialisation. It should also be noted that in addition to the standard type programmes, students at especially Universities have considerable latitude to construct their own degree programmes and as a result it is difficult to analytically categorise degree programmes offered because of the variation in the internal structure of programmes. This variation and large range of sub-specialisation opportunities subsequently also demands from the lecturing staff at HET institutions (especially those offering specialisation) to have a wide range of specialisation knowledge and skills. Table 4.2 below reflects the agricultural degrees and programmes offered at the various Universities.

Degree	Programme	Uni vers ity of Fort Har e	Univ ersit y of Kwa Zulu N a t al	Univ ersit y of Nort h Wes t	Univ ersit y of Pret oria	Univ ersit y of Stell e n b o s c h	Univ ersit y of t h e Free Stat e	Univ ersit y of t h e Nort h	Univ ersit y of V e n da	Univ ersit y of Zulu land
Bagric										
	General	х					Х		Х	
	Management		Х							
	Agricultural Education					х				
	Administration									
Binst Agr	ar									
					х					
BSc Agric										
	General		Х		х		х		X	
	Agricultural Administration							х		
	Agricultural and Economic Analysis					Х				
	Agricultural Economics			Х	Х					
	Agriculture and Rural Development									Х
	Agronomy							х		Х
	Animal Health			х						
	Animal Science			Х						Х
	Crop Science			х						
	Horticulture							х		
	Land Management			X						
	Pasture Science							X		
	Plant Production							X		
	Science and Agribusiness		X							
	Soil Science							х		
	Wine Production Systems					х				
Bcom										
	Agricultural Economics					X	х			

Table 3.12: Years practical agricultural experience lecturers at FET Colleges, March 2008

Source: DoA Report on the 10 Year HRD on Agricultural Graduate Output in SAQA accredited HET Institutions, 2006

4.2 METHODOLOGY APPLIED

Given that there are only 15 HET institutions (9 Universities and 6 Universities of Technology) that offer agricultural qualifications and programmes it was decided to obtain detailed lecturer profiling information from each institution. To this end a Profiling Template (questionnaire) was distributed to each of HET institution (via email and fax). The information fields for which data was collected are the following:

4.3 RESPONSE RATE

All institutions included in the survey were followed up extensively via telephone calls and follow-up emails and it can be reported that 15 HET institutions (7 Universities and 5 Universities of Technology) responded which is a 73.33% response rate (UNISA and Technikon SA as well as the Cape Peninsula and Cape Technikon viewed as single/merged institutions). These 15 institutions had a combined lecturer complement of 405 lecturers offering agricultural programmes. This response rate is more than sufficient to provide an accurate and valid profile of the target group.

Table 4.3: Response rate to the survey

INSTITUTION	PROVINCE	TOTAL	RESPONSE	% REPONSE RATE
CAPE PENINSULAR UNIVERSITY OF THECHNOLOGY/CAPE TECH	WESTERN CAPE	1	1	6.67
CENTRAL UNIVERSITY OF TECHNOLOGY	FREE STATE	1	1	6.67
NELSON MANDELA METRPOLITAN UNIVERSITY	EASTERN CAPE	1	1	6.67
MANGOSUTHU TECHNIKON	KWA-ZULU NATAL	1	0	0.00
TSHWANE UNIVERSITY OF TECHNOLOGY	GAUTENG	1	1	6.67
UNIVERSITY OF FORT HARE	EASTERN CAPE	1	1	6.67
UNIVERSITY OF KZN	KWA-ZULU NATAL	1	1	6.67
UNIVERSITY OF NORTH WEST	NORTH WEST	1	0	0.00
UNIVERSITY OF PRETORIA	GAUTENG	1	1	6.67
UNIVERSITY OF STELLENBOSCH	WESTERN CAPE	1	1	6.67
UNIVERSITY OF THE FREE STATE	FREE STATE	1	1	6.67
UNIVERSITY OF LIMPOPO	LIMPOPO	1	0	0.00
UNIVERSITY OF ZULULAND	KWA-ZULU NATAL	1	1	6.67
UNIVERSITY OF VENDA	LIMPOPO	1	0	0.00
UNISA (TECH SA)	GAUTENG	1	1	6.67
TOTALS		15	11	73.33

4.4 PROFILING INFORMATION AND RESULTS

The key profiling related findings and results for lecturers offering agricultural learning programmes at the HET institutions are as follows

4.4.1 AGE OF LECTURERS

Table 4.4 below indicates the age breakdown of lecturers in the responding HET Institutions. From the information the following age related observations are made:

- As can be expected (given that lecturers at HET institutions generally hold more than one post graduate qualification) they are as a rule older that lecturers at the other learning institutions and the majority fall in the age group 40-50 years (32%).
- A combination of the "age" and "experience in lecturing" data sets reveal that within this dominant age group of 40-50 years old, 65 per cent the lecturers had 10 or more years experience in lecturing agricultural programmes and can thus be viewed as having good experience.

PROVINCES		AGE (OF LECTU	JRERS PE	R PROV	INCE		TOTAL
AGE	20 - 30	30-40	40-50	50-60	60-70	70-80	NA	NO
KZN	0	12	10	7	1	0	23	53
GAUTENG	9	36	42	43	9	0	0	139
LIMPOPO	0	0	0	0	0	0	0	0
WESTERN CAPE	4	37	30	16	3	1	0	91
FREE STATE	8	17	24	18	6	0	0	73
NORTH WEST	0	0	0	0	0	0	0	0
EASTERN CAPE	0	6	26	15	2	0	0	49
NATIONAL TOTAL	21	108	132	99	21	1	23	405

Table 4.4: Age of Lecturers in the FET Colleges, March 2008

Table 4.4: Age of Lecturers in the FET Colleges, March 2008 (continued)

PROVINCES		PERC	CENTAGE	AGE PE	R PROVI	NCE		TOTAL
AGE	20 - 30	30-40	40-50	50-60	60-70	70-80	NA	%
KZN	0.0	22.6	18.87	13.2	1.9	0.0	43.4	100
GAUTENG	6.5	25.9	30.22	30.9	6.5	0.0	0.0	100
LIMPOPO	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0
WESTERN CAPE	4.4	40.7	32.97	17.6	3.3	1.1	0.0	100
FREE STATE	11.0	23.3	32.88	24.7	8.2	0.0	0.0	100
NORTH WEST	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0
EASTERN CAPE	0.0	12.2	53.06	30.6	4.1	0.0	0.0	100
NATIONAL TOTAL	5.2	26.7	32.59	24.4	5.2	0.2	5.7	100.0

4.4.2 GENDER OF LECTURERS

The second profiling characteristic identified was the gender of staff and Table 4.5 below provides a gender breakdown of lecturers in the HET Institutions.

Table 4.5: Gender breakdown of lecturers at the HET Institutions	, March 2008
--	--------------

PROVINCES	GEN	DER	TOTAL	GENDI	E R (%)	TOTAL
GENDER	Female	Male	NO	Female	Male	%
KZN	20	33	53	37.7	62.3	100.0
GAUTENG	50	89	139	36.0	64.0	100.0
LIMPOPO	0	0	0	0.0	0.0	0
WESTERN CAPE	43	48	91	47.3	52.7	100.0
FREE STATE	11	62	73	15.1	84.9	100.0
NORTH WEST	0	0	0	0.0	0.0	0
EASTERN CAPE	4	45	49	8.2	91.8	100.0
NATIONAL TOTAL	128	277	405	31.6	68.4	100.0

From the information the following important gender related observations are made:

- Male lecturers are dominant with 68% of all lecturing posts occupied by males. Male dominance is particularly
 evident in the Eastern Cape (92%) and Free State (85%) provinces. It is proposed that the HET institutions in these
 two provinces give particular attention to this matter towards addressing employment equity targets and since
 it may send wrong messages to prospective female students interested in following an agricultural career and
 furthering their agricultural studies at these institutions of learning.
- A combination of the gender and qualification data sets reveal the interesting observation that proportionally males hold higher qualifications than their female counter parts. The following serve as illustration of this point:

Whilst only representing 32% of the total lecturer corps, females comprise 46% of all lecturers who only hold Bachelors degrees.

- At Honours degree level they comprise 39% of the total complement
- At Masters degree level they comprise 34% of the total complement
- At Doctorate degree level they only comprise 24% of the total complement

4.4.3 RACIAL BREAKDOWN OF LECTURERS

A further key aspect of the lecturer profiling assignment is the racial composition of the lecturer corps. Table 4.6 provides a racial breakdown of lecturers in the HET Institutions.



Table 4.6: Racial composition of Lecturers at HET Institutions, Marc	h 2008
--	--------

PROVINCES	RACE BR	REAKDO	WN (NU	J MBER	TOTAL	% RA	CE BRE	AKDO	WN	TOTAL
RACE	В	W	С	I	NO	В	W	С	I	%
KZN	14	36	0	3	53	26.4	67.9	0.0	5.7	100
GAUTENG	45	92	1	1	139	32.4	66.2	0.7	0.7	100
LIMPOPO	0	0	0	0	0	0.0	0.0	0.0	0.0	0
WESTERN CAPE	5	80	6	0	91	5.5	87.9	6.6	0.0	100
FREE STATE	11	62	0	0	73	15.1	84.9	0.0	0.0	100
NORTH WEST	0	0	0	0	0	0.0	0.0	0.0	0.0	0
EASTERN CAPE	14	35	0	0	49	28.6	71.4	0.0	0.0	100
NATIONAL TOTAL	89	305	7	4	405	22.0	75.3	1.7	1.0	100

From the information the following important racial composition related observations are made:

- It is evident that the HET institutions have not yet been able to attain employment equity from a racial perspective with 75% of all lecturers belonging to the white population group. Attention is specifically drawn to the Western Cape (88%) and Free State (85%) provinces.
- A combination of the racial and qualification data sets reveal that this 25% representation is found at all levels of qualification (i.e. from bachelor's degree level through to doctorate degree level). This suggests sufficient numbers of highly qualified black candidates with an interest to take up employment positions at institutions of higher education.

4.4.4 TEACHING/LECTURING EXPERIENCE OF INSTRUCTIONAL STAFF

Table 4.7x reflects the lecturing (teaching) experience of the agricultural lecturers in the HET Institutions.

PROVINCES	EXPERI	ENCE	OF LI	ECTURE	R (YEARS)	% EXPERI	ENCE OI	F LECTI	JRER	
YEARS	0-3	4-6	7-9	10+	NO	0-3	4-6	7-9	10+	TOTAL
KZN	7	7	6	16	53	13.2	13.2	11.3	30.2	100
GAUTENG	35	21	23	60	139	25.2	15.1	16.5	43.2	100
LIMPOPO	0	0	0	0	0	0.0	0.0	0.0	0.0	0
WESTERN CAPE	28	14	8	41	91	30.8	15.4	8.8	45.1	100
FREE STATE	5	12	6	49	73	6.8	16.4	8.2	67.1	100
NORTH WEST	0	0	0	0	0	0.0	0.0	0.0	0.0	0
EASTERN CAPE	1	3	4	41	49	2.0	6.1	8.2	83.7	100
N A T I O N A L TOTAL	76	57	47	207	405	18.8	14.1	11.6	51.1	100

Table 4.7: Years teaching experience of lecturers at HET Institutions, March 2008

From the information the following important experience related observations are made:

• The overwhelming majority of lecturers have 10 years or more experience (51%). This indicates a relative experienced and stable teaching corps. This is especially true in the Eastern Cape where 83% of lecturers have more than 10 years experience in the education field

4.4.5 AGRICULTURAL EXPERIENCE OF LECTURING STAFF

Table 4.8 reflects the practical agricultural experience of the agricultural lecturers in the HET Institutions.

YEAR	S EX	PER	IEN	CE II	N AG	GRICU	JLTUR	Е	% EXPEREINCE IN AGRICULTURE							
YEARS	0	1	2	3	4	5+	NA	NO	0	1	2	3	4	5+	NA	Total
KZN	0	3	2	2	2	27	17	53	0.0	5.7	3.77	3.8	3.8	50.9	32.1	100.0
GAUTENG	15	8	6	6	7	97	0	139	10.8	5.8	4.32	4.3	5.0	69.8	0.0	100.0
LIMPOPO	0	0	0	0	0	0	0	0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0
W E S T E R N CAPE	4	4	10	10	2	61	0	91	4.4	4.4	10.99	11.0	2.2	67.0	0.0	100.0
FREE STATE	0	2	2	1	2	55	1	63	0.0	3.2	3.17	1.6	3.2	87.3	1.6	100.0
NORTH WEST	0	0	0	0	0	0	0	0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0
E A S T E R N CAPE	0	0	1	0	1	47	0	49	0.0	0.0	2.04	0.0	2.0	95.9	0.0	100.0
N A T I O N A L TOTAL	19	18	23	22	18	287	18	405	4.7	4.4	5.68	5.4	4.4	70.9	4.4	100.0

From the information the following key observations and conclusions are made:

- It is surprising to note that 70% of the lecturers indicated that they have had more than 5 years experience in the agricultural sector (with as little as 5% who have no experience of the sector). This is possibly as a result of the new practice and approach within HET institutions to encourage lecturers to become involved in consultancy work within their respective fields and to generate income for their faculties.
- A combination of experience and age related data sets reflect a direct correlation between age and experience within the agricultural sector with the older age groups having more experience. In this regard lecturers within the age group 20-30 years for instance showed that 76% had only between 0-3 years experience whilst in the age group 50-60 years more than 70% indicated that they had at least 10 years experience.

4.4.6 QUALIFICATIONS OF LECTURING STAFF

Table 4.9 provides a breakdown of the qualifications held by lecturers in the HET Institutions. From the information the following observations and remarks are made:

		HIGEST QUAL	IFICATION P	ER PROVINC	E		TOTAL		PERCENTAG	E EXPERIEN	CE LECTURE	RS		TOTAL
YEARS	DIPLOMA	BACHELORS	HONOURS	MASTERS	DOCTORAL	NA	NO	DIPLOMA	BACHELORS	HONOURS	MASTERS	DOCTORAL	NA	%
KZN	0	1	3	21	27	1	53	0.0	1.9	5.7	39.6	50.9	1.9	100
GP	1	13	14	39	72	0	139	0.7	9.4	10.1	28.1	51.8	0.0	100
LIMPOPO	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0
WC	0	2	3	19	67	0	91	0.0	2.2	3.3	20.9	73.6	0.0	100
FS	0	5	3	17	48	0	73	0.0	6.8	4.1	23.3	65.8	0.0	100
NW	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0
EC	0	3	0	26	20	0	49	0.0	6.1	0.0	53.1	40.8	0.0	100
NATIONAL T	1	24	23	122	234	1	405	0.2	5.9	5.7	30.1	57.78	0.25	100

Table 4.9: Qualifications of lecturers per province at the HET Institutions, March 2008

From the above table it is clear that:

- The majority of the lecturer population in this study have a doctoral degree (58%)
- The Masters Degree is the second highest qualification (30%)
- It is thus evident that lecturing staff at the HET institutions are well qualified from an academic perspective.

Table 4.9: Qualifications of lecturers per province at the HET Institutions, March 2008

	HIGHEST QUALIFICATION PER RACE & GENDER	BF	BM	WF	WM	CF	CM	F	IM	TOTAL	TOTAL %
1	NATIONAL DIPLOMA	0	0	1	0	0	0	0	0	1	0.2
2	BACHELOR DEGREE	1	5	10	7	1	0	0	0	24	5.9
3	HONOURS DEGREE	2	2	7	11	0	0	1	0	23	5.7
4	MASTERS DEGREE	10	17	32	61	0	0	2	0	122	30.1
5	DOCTORAL DEGREE	7	44	50	126	3	3	0	1	234	57.8
6	INFORMATION NOT PROVIDED	1	0	0	0	0	0	0	0	1	0.2
	TOTALS	21	68	100	205	4	3	3	1	405	100.0



With regards to Race and Gender breakdown of the lecturer qualification, the following is clear:

• The highest overall qualification per race and gender is represented by white males (51%)

	% HIGHEST QUALIFICATION PER RACE & GENDER	BF	BM	WF	WM	CF	СМ	IF	IM	TOTAL %
1	NATIONAL DIPLOMA	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25
2	BACHELOR DEGREE	0.25	1.23	2.47	1.73	0.25	0.00	0.00	0.00	5.93
3	HONOURS DEGREE	0.49	0.49	1.73	2.72	0.00	0.00	0.25	0.00	5.68
4	MASTERS DEGREE	2.47	4.20	7.90	15.06	0.00	0.00	0.49	0.00	30.12
5	DOCTORAL DEGREE	1.73	10.86	12.35	31.11	0.74	0.74	0.00	0.25	57.78
6	INFORMATION NOT PROVIDED	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
	TOTALS	5.19	16.79	24.69	50.62	0.99	0.74	0.74	0.25	100

followed by white females (25%)

- The highest qualification: white males represent 31% of all the doctoral degrees followed by white females at 12% and by black males at 11%
- Indian males are the least represented within the total lecturer population at 0.25% and consists of 1 Doctoral Degree.

4.4.7 STAFF UTILIZATION IN TERMS OF SUBJECTS OFFERED

It was also attempted to identify the allocation of lecturers in terms of subjects offered. From Table 4.11 is evident that the programmes/courses offered by the HET Institutions are quite varied and with various specialisation fields).

Table 4.11: Lecturer utilisation in terms of subject offering at HET Institutions, March 2008

SUBJECTS OFFERED PER LECTURER (R&G)	BF	BM	WF	WM	CF	CM	IF	IM	TOTAL	×
1 AGRICULTURAL ECONOMICS (INCL. EXTENSION & RURAL DEVI	0	6	5	26	0	1	0	0	38	9.4
2 AGRICULTURAL ENGINEERING	0	1	0	4	0	0	0	0	5	1.2
3 AGRICULTURAL MANAGEMENT	0	9	3	27	0	0	0	0	39	9.6
4 AGRICULTURAL SCIENCES	4	10	6	6	0	0	1	0	27	6.7
5 AGRICULTURAL SCIENCE & AGRIBUSINESS	2	4	10	9	0	0	2	0	27	6.7
6 AGRONOMY	0	0	1	2	0	0	0	0	3	0.7
7 ANIMAL & WILDLIFE SCIENCE	0	2	4	9	0	0	0	0	15	3.7
8 ANIMAL HEALTH	1	3	1	0	0	0	0	0	5	1.2
9 ANIMAL PRODUCTION	1	2	2	6	0	0	0	0	11	2.7
10 ANIMAL SCIENCES	0	1	3	3	0	0	0	0	7	1.7
11 ANIMAL WILDLIFE & PASTURE	0	0	0	12	0	0	0	0	12	3.0
12 ASNAPP	0	0	0	1	0	0	0	0	1	0.2
13 BIOLOGICAL & CONSERVATION SCIENCES	0	0	0	2	0	0	0	0	2	0.5
14 CONSERVATION ECOLOGY & ENTOMOLOGY	0	1	5	2	1	1	0	0	10	2.5
15 CONSUMER SCIENCE	0	0	15	0	0	0	0	0	15	3.7
16 ENVIRONMENTAL AGRICULTURE & DEVELOPMENT	0	2	2	2	0	0	0	0	6	1.5
17 EXTENDED CURRICULUM AGRICULTURE	2	0	1	1	0	0	0	0	4	1.0
18 EXTENSION & RURAL RESOURCES	0	0	1	1	0	0	0	0	2	0.5
19 FOOD SCIENCES	0	1	11	6	1	0	0	1	20	4.9
20 FOREST & WOOD SCIENCE	0	1	1	6	0	0	0	0	8	2.0
21 GAME RANCH MANAGEMENT	0	0	0	15	0	0	0	0	15	3.7
22 GENETICS	0	0	4	4	1	0	0	0	9	2.2
23 HORTICULTURAL SCIENCE	0	0	5	1	0	0	0	0	6	1.5
24 HUMAN ECOLOGY (COMMUNITY AGRICULTURE & NUTRITION	4	0	2	0	0	0	0	0	6	1.5
25 INST AGRAR	0	0	0	1	0	0	0	0	1	0.2
26 MATHEMATICS	0	0	0	2	0	0	0	0	2	0.5
27 NUTRITION	0	0	0	1	0	0	0	0	1	0.2
28 PLANT BIOTECHNOLOGY	0	1	0	2	0	0	0	0	3	0.7
29 PLANT PATHOLOGY	0	0	3	2	0	0	0	0	5	1.2
30 PLANT PRODUCTION & SOIL SCIENCE	0	1	3	8	0	1	0	0	13	3.2
31 SCIENCE & AGRICULTURE	4	10	0	4	0	0	0	0	18	4.4
32 SOIL CROP & CLIMATE SCIENCE	0	13	10	32	0	0	0	0	55	13.6
33 SUSTAINABLE AGRICULTURE	0	0	0	3	0	0	0	0	3	0.7
34 VITICULTURE & DENOLOGY	0	0	5	5	1	0	0	0	11	2.7
TOTALS	18	68	103	205	4	3	3	1	405	100.0

Information in the above table indicates the following:

- A total of 34 subjects were identified from the questionnaires received from the HET institutions that responded
- Subjects offered are taught by predominantly white males and females (309), followed by black males and females (86)
- Subjects offered by most lecturers are Soil, Crop and Climate science (55%) followed by Agricultural Management (10%) and Agricultural Economics, Extension and Rural Development (9%)

Table 4.11(a): Subject offered per lecturer per province

	SUBJECTS OFFERED PER LECTURER (PROVINCE)	KZN	GAUTENG	LIMPOPO	WC	FS	NW	EC	TOTAL	%
1	AGRICULTURAL ECONOMICS (EXTENSION & RURAL DEVELOPN	0	20	0	6	12	0	0	38	9.4
2	AGRICULTURAL ENGINEERING	5	0	0	0	0	0	0	5	1.2
3	AGRICULTURAL MANAGEMENT	0	8	0	0	15	0	16	39	9.6
- 4	AGRICULTURAL SCIENCES	7	6	0	6	8	0	0	27	6.7
5	AGRICULTURAL SCIIENCE & AGRIBUSINESS	27	0	0	0	0	0	0	27	6.7
6	AGRONOMY	0	0	0	3	0	0	0	3	0.7
7	ANIMAL & WILDLIFE SCIENCE	0	15	0	0	0	0	0	15	3.7
8	ANIMAL HEALTH	0	5	0	0	0	0	0	5	1.2
9	ANIMAL PRODUCTION	0	11	0	0	0	0	0	11	2.7
10	ANIMAL SCIENCES	0	0	0	7	0	0	0	7	1.7
11	ANIMAL WILDLIFE & PASTURE	0	0	0	0	12	0	0	12	3.0
12	ASNAPP	0	Ö	0	1	0	0	0	1	0.2
13	BIOLOGICAL & CONSERVATION SCIENCES	2	0	0	0	0	0	0	2	0.5
14	CONSERVATION ECOLOGY & ENTOMOLOGY	0	0	0	10	0	0	0	10	2.5
15	CONSUMER SCIENCE	0	15	0	0	0	0	0	15	3.7
16	ENVIRONMENTAL AGRICULTURE & DEVELOPMENT	6	0	0	0	0	0	0	6	1.5
17	EXTENDED CURRICULUM AGRICULTURE	0	0	0	0	4	0	0	4	1.0
18	EXTENSION & RURAL RESOURCES	2	0	0	0	0	0	0	2	0.5
19	FOOD SCIENCES	0	7	0	8	5	0	0	20	4.9
20	FOREST & WOOD SCIENCE	0	0	0	8	0	0	0	8	2.0
21	GAME RANCH MANAGEMENT	0	0	0	0	0	0	15	15	3.7
22	GENETICS	0	0	0	9	0	0	0	9	2.2
23	HORTICULTURAL SCIENCE	0	0	0	6	0	0	0	6	1.5
24	HUMAN ECOLOGY (COMMUNITY AGRICULTURE & NUTRITION	0	6	0	0	0	0	0	6	1.5
25	INST AGRAR	0	0	0	1	0	0	0	1	0.2
26	MATHEMATICS	0	0	0	2	0	0	0	2	0.5
27	NUTRITION	0	1	0	0	0	0	0	1	0.2
28	PLANT BIOTECHNOLOGY	0	0	0	3	0	0	0	3	0.7
29	PLANT PATHOLOGY	0	0	0	5	0	0	0	5	1.2
30	PLANT PRODUCTION & SOIL SCIENCE	0	13	0	0	0	0	0	13	3.2
31	SCIENCE & AGRICULTURE	0	0	0	0	0	0	18	18	4.4
32	SOIL CROP & CLIMATE SCIENCE	4	32	0	5	14	0	0	55	13.6
33	SUSTAINABLE AGRICULTURE	0	0	0	0	3	0	0	3	0.7
34	VITICULTURE & OENOLOGY	0	0	0	11	0	0	0	11	2.7
	TOTALS	53	139	0	91	73	0	49	405	100.0

The above table depicts the following:

- Gauteng has the highest number of lecturers (139) followed by the Western Cape (91) and the Free State (73)
- Subjects offered by most lecturers are Soil, Crop and Climate Science (14%) followed by Agricultural Management (10%) and Agricultural Economics (incl. extension and rural development) (9%)
- Gauteng has 139 lecturers offering 12 subjects
- The Western Cape has 91 lecturers offering 16 subjects. The western Cape therefore has the highest subject offering
- The Free State has 73 lecturers offering 8 subjects
- The Eastern Cape has the lowest subject offering and lecturers teaching these subjects (49 lecturers offering 3 subjects.

Table 4.11 (b): Percentage of subject offered per lecturer per province

	% SUBJECTS OFFERED PER LECTURER (PROVINCE)	KZN	GAUTENG	LIMPOPO	wc	FS	NW	EC	TOTAL %
1	AGRICULTURAL ECONOMICS (EXTENSION & RURAL DEVELOPM	0.00	4.94	0.00	1.48	2.96	0.00	0.00	9.38
2	AGRICULTURAL ENGINEERING	1.23	0.00	0.00	0.00	0.00	0.00	0.00	1.23
3	AGRICULTURAL MANAGEMENT	0.00	1.98	0.00	0.00	3.70	0.00	3.95	9.63
4	AGRICULTURAL SCIENCES	1.73	1.48	0.00	1.48	1.98	0.00	0.00	6.67
5	AGRICULTURAL SCIIENCE & AGRIBUSINESS	6.67	0.00	0.00	0.00	0.00	0.00	0.00	6.67
6	AGRONOMY	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.74
7	ANIMAL & WILDLIFE SCIENCE	0.00	3.70	0.00	0.00	0.00	0.00	0.00	3.70
8	ANIMAL HEALTH	0.00	1.23	0.00	0.00	0.00	0.00	0.00	1.23
9	ANIMAL PRODUCTION	0.00	2.72	0.00	0.00	0.00	0.00	0.00	2.72
10	ANIMAL SCIENCES	0.00	0.00	0.00	1.73	0.00	0.00	0.00	1.73
11	ANIMAL WILDLIFE & PASTURE	0.00	0.00	0.00	0.00	2.96	0.00	0.00	2.96
12	ASNAPP	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25
13	BIOLOGICAL & CONSERVATION SCIENCES	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.49
14	CONSERVATION ECOLOGY & ENTOMOLOGY	0.00	0.00	0.00	2.47	0.00	0.00	0.00	2.47
15	CONSUMER SCIENCE	0.00	3.70	0.00	0.00	0.00	0.00	0.00	3.70
16	ENVIRONMENTAL AGRICULTURE & DEVELOPMENT	1.48	0.00	0.00	0.00	0.00	0.00	0.00	1.48
17	EXTENDED CURRICULUM AGRICULTURE	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.99
18	EXTENSION & RURAL RESOURCES	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.49
19	FOOD SCIENCES	0.00	1.73	0.00	1.98	1.23	0.00	0.00	4.94
20	FOREST & WOOD SCIENCE	0.00	0.00	0.00	1.98	0.00	0.00	0.00	1.98
21	GAME RANCH MANAGEMENT	0.00	0.00	0.00	0.00	0.00	0.00	3.70	3.70
22	GENETICS	0.00	0.00	0.00	2.22	0.00	0.00	0.00	2.22
23	HORTICULTURAL SCIENCE	0.00	0.00	0.00	1.48	0.00	0.00	0.00	1.48
24	HUMAN ECOLOGY (COMMUNITY AGRICULTURE & NUTRITION	0.00	1.48	0.00	0.00	0.00	0.00	0.00	1.48
25	INST AGRAR	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25
26	MATHEMATICS	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.49
27	NUTRITION	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25
28	PLANT BIOTECHNOLOGY	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.74
29	PLANT PATHOLOGY	0.00	0.00	0.00	1.23	0.00	0.00	0.00	1.23
30	PLANT PRODUCTION & SOIL SCIENCE	0.00	3.21	0.00	0.00	0.00	0.00	0.00	3.21
31	SCIENCE & AGRICULTURE	0.00	0.00	0.00	0.00	0.00	0.00	4.44	4.44
32	SOIL CROP & CLIMATE SCIENCE	0.99	7.90	0.00	1.23	3.46	0.00	0.00	13.58
33	SUSTAINABLE AGRICULTURE	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.74
34	VITICULTURE & OENOLOGY	0.00	0.00	0.00	2.72	0.00	0.00	0.00	2.72
_	TOTALS	13.09	34.32	0.00	22.47	18.02	0.00	12.10	100.00

This table shows the total percentage of subject offered per lecturer per province. From this the following becomes apparent:

- 34% of the total lecturers teach in Gauteng, followed by the Western Cape 22% and the Free State 18%
- The province with the least lecturers is the Eastern Cape with 12% of the total population

Table 4.11(c): Subject offering per Province

SUBJECTS OFFERED PER PROVINCE	KZN	GAUTENG	LIMPOPO	WC	FS	NW	EC	TOTAL SUBJECTS
NUMBER OF SUBJECT OFFERED	7	12	0	16	8	0	3	34
PERCENTAGE OF ALL SUBJECTS OFFERED	20.6	35.3	0.0	47.1	23.5	0.0	8.8	54

• The above table shows that of the 34 total subjects offered at the various HET institutions nationally, the province with the largest subject offering is the Western Cape (47%), followed by Gauteng (35%) and the Free State (24%). The province with the least subject offering is the Eastern Cape (9%)



CHAPTER 5: CONCLUSIONS RE AREAS OF CONCERN

This section of the report provides a summary of the most salient issues identified during the profiling study. Focus is placed on shortfalls and constraints identified and which requires attention.

5.1 PROFILING ISSUES RELATED TO TEACHERS AT ACADEMIC SCHOOLS

Whilst the necessary information required for undertaking a detailed profiling of teachers at academic schools were not forthcoming from the DoE EMIS database, the following important observations could nevertheless be made from the other information gathered:

5.1.1 A considerable proportion of teachers offering the subject Agricultural Science at mainstream academic schools do not have sufficient qualifications or training to competently deliver the subject (at least 25% of the sample group were under-qualified).

5.1.2 Very few teachers have had practical agricultural experience and exposure (especially in a commercial environment). They thus lack practical knowledge and the context within which the subject is offered.

5.1.3 Teachers generally lack entrepreneurship knowledge and skills within an agricultural context and thus have shortfalls to teach farming as a business.

5.2 PROFILING ISSUES RE TEACHERS IN AGRICULTURAL HIGH SCHOOLS

The following key profiling observations are based on the responses received from the 32 Agricultural High Schools (106 teachers) that participated in the profiling survey.

5.2.1 **Gender:** Male lecturers are dominant with 80% of all posts occupied by males. It is proposed that the schools give attention to this matter towards addressing employment equity targets and since it may send wrong messages to prospective female students interested in following an agricultural career.

5.2.2 **Race:** It is evident that the agricultural high schools have made little progress towards attaining employment equity from a racial perspective with 69% of all lecturers falling in the white population group. White lecturers are particularly dominant in the Western Cape (100%) and Northern Cape (87%). This issue demands urgent attention.

5.2.3 **Experience:** The overwhelming majority of lecturers have had no practical agricultural working experience (70%) and their knowledge of the subject is thus of an academic nature only. From a planning and development perspective specific opportunities and means need to be created for the large group of inexperienced teachers to expose them to practical farming practice in their respective fields of study.

5.2.4 **Qualifications:** It can generally be concluded that the formal qualifications of the agricultural teacher corps in the agricultural high schools are relatively high when compared to the teaching fraternity in South Africa (with 60% of the group holding either degrees or post degree qualifications).

5.2 PROFILING ISSUES RE LECTURERS AT AGRICULTURAL COLLEGES

The following key profiling observations are based on the responses received from the 10 Agricultural Colleges (174 lecturers) that participated in the profiling survey.

5.2.1 **Age:** Generally speaking the lecturers are quite young (30% under the age of 30 years) and raises a question regarding their ability to transfer knowledge and skills to the students. This becomes particularly evident when considering that 85% of all lecturers have had little or no practical experience within a commercial farming context.

5.2.2 **Race:** It is evident that the colleges have been able to attain employment equity from a racial perspective with 67% of all lecturers falling in the black population group. Black lecturers are particularly dominant in the North West and East Cape provinces where only black lecturers are employed (100%). In contrast the Northern Cape and KZN provinces still have a dominant white staffing profile with white lecturers respectively making up 90% and 66% of the lecturing complement. From a planning and succession perspective it is important to note that a linking of the race and agricultural experience data reflect that practical agricultural experience is primarily seated amongst white lecturers. Specific attention thus needs to be given to means of providing black lecturers with the opportunity to gain practical agricultural experience.

5.2.3 **Experience:** The overwhelming majority of lecturers (48%) have less than 3 years lecturing experience. This indicates a high turnover in staff which requires attention. Regarding practical agricultural experience the situation is bleak with many having now practical experience (50% falling in the category 0-3 years experience.)

5.2.4 **Qualifications:** Lecturers are generally well qualified with 29% holding post graduate degrees and a further 44% having been qualified to degree level. It must however also be noted that 24% of the lecturers only hold qualifications at a Diploma level and a further 3% at a Certificate level. Good academic practice prescribes that lecturers should only offer learning programmes (especially programmes leading up to qualifications) at a NQF level that is lower than their own qualifications. This implies that this group of lecturers should confine themselves to offering skills programmes of a NQF level 4 and lower.

5.3 PROFILING ISSUES RE LECTURERS AT OTHER FET COLLEGES

The following key profiling observations are based on the responses received from the 12 FET Colleges (40 lecturers) that participated in the profiling survey.

5.3.1 **Age:** Generally speaking the lecturers are quite young (33% under the age of 30 years) and raises a question regarding their ability to transfer knowledge and skills to the students. This is especially true in the East Cape and Limpopo Provinces where respectively 66% and 60% of al lecturers are under the age of 30 years.

5.3.2 **Gender:** Male lecturers are dominant with 75% of all posts occupied by males. This is particularly evident in the Eastern Cape, Free State , Limpopo and Mpumalanga Provinces where 100% of the respondents were male.

5.3.3 **Race:** It is evident that the FET colleges have been able to attain employment equity from a racial perspective with 75% of all lecturers falling in the black population group. Black lecturers fill all posts in 5 of the provinces. The only exception is the Western Cape where no posts are held by black lecturers.

5.3.4 **Experience:** Whilst 42% of the lecturers have 10 or more years teaching experience, the overwhelming majority of lecturers have had little practical agricultural experience (35% have no experience). This is especially high in KZN where 73% of the lecturers have indicated that they have never worked in the farming sector prior to becoming lecturers.

5.3.5 **Qualifications:** It is interesting to note that the qualifications of lecturers at the FET Colleges are lower than those employed by the Agricultural Colleges. At the FET Colleges only 47% of the lecturers hold degree and/or post degree qualifications (as opposed to 63% at the Agricultural Colleges). FET colleges further employ some lecturers with Certificate qualifications only (12%) and a further relatively large group (40%) only has a Diploma as highest qualification. This could be a cause of concern should such staff offer learning programmes at a NQF level 4 or higher.

5.4 PROFILING ISSUES RELATED TO LECURERS AT HET INSTITUTIONS

The following key profiling observations are based on the responses received from the 15 HET Institutions (9 Universities and 5 Universities of Technology with a combined total of 405 lecturers) that participated in the profiling survey.

5.4.1 **Age:** As can be expected (given that lecturers at HET institutions generally hold more than one post graduate qualification) they are as a rule older that lecturers at the other learning institutions and the majority fall in the age group 40-50 years (32%). A combination of the "age" and "experience in lecturing" data sets reveal that within this dominant age group of 40-50 years old, 65 per cent the lecturers had 10 or more years experience in lecturing agricultural programmes and can thus be viewed as having good experience.

5.4.2 **Gender:** Male lecturers are dominant with 68% of all lecturing posts occupied by males. Male dominance is particularly evident in the Eastern Cape (92%) and Free State (85%) provinces. It is proposed that the HET institutions in these two provinces give particular attention to this matter towards addressing employment equity targets and since it may send wrong messages to prospective female students interested in following an agricultural career and furthering their agricultural studies at these institutions of learning.

5.4.3 **Race:** It is evident that the HET institutions have not yet been able to attain employment equity from a racial perspective with 75% of all lecturers belonging to the white population group. Attention is specifically drawn to the Western Cape (88%) and Free State (85%) provinces. A combination of the racial and qualification data sets reveal that this 25% representation is found at all levels of qualifications (i.e. from bachelor's degree level through to doctor-

ate degree level). This suggests sufficient numbers of highly qualified black candidates with an interest to take up employment positions at institutions of higher education.

5.4.4 **Experience:** Lecturers at the HET institutions generally have good teaching experience with more than 50% indicating 10 or more lecturing experience. It was also surprising to note that 70% of the HET lecturers indicated at least 5 years experience of a practical nature in the agricultural sector.

5.4.5 **Qualifications:** As could be expected the qualifications of HET staff are good and they are well qualified (58% hold Doctorate degrees and 30% Masters degrees).

ANNEXURE A

INFORMATION COLLECTION TEMPLATE

FOR AGRICULTURAL HIGH SCHOOLS

TEAC	TEACHER PROFILING TEMPLATE FOR A	TE FOR AGRICULTURAL SCHOOLS	SLOOLS							
٢	SCHOOL NAME									
1.1										
1.2	CONTACT TEL NO									
1.3	CONTACT FAX NO									
1.4	1.4 EMAIL									
7	NUMBER OF TEACHERS OFFERING AGRICULTURAL SUBJECTS AT SCHOOL									
~	AGBICHTTIBAL TEACHER DETAIL									
2	AGNICOLIONAL ILACII									
	Teacher's Name	Agricultural Subject Offered (e.g. Agric Science OR Agric Man Practice OR Agric Technology)	RaceGender(Black, (Black, (Female or Male)Male)Colour Indian)	Race (Black, White, Coloured, Indian)	Age	National ity (SA or Non- SA)	Qualification (highest obtained)	Year that No years No of years highest experience experienc in other on was teaching (if any)	No years experienc e in teaching	No of years experience in other agriculture (if any)
3.1										
3.2										
3.3										
3.4										
3.5										
3.6										
3.7										
3.8										
3.9										
3.11										
3.12										
3.13										
3.14										
3.15										
3.16										
3.17										
3.18										

DEPARTMENT OF AGRICULTURE

ANNEXURE B

INFORMATION COLLECTION TEMPLATE

FOR AGRICULTURAL AND FET COLLEGES

LECT	URER PROFILING TEMPL	LECTURER PROFILING TEMPLATE FOR AGRICULTURAL COLLEGES	COLLEGES							
.]										
1.1	17									
1.2	CONTACT TEL NO									
1.3	CONTACT FAX NO									
1.4	EMAIL									
	NUMBER OF									
N	LECTURERS OFFERING AGRICULTURAL SUBJECTS AT COLLEGE	Please indicate number								
۰										
		Programme / Subject		Race		National			No years	No of years
	Lecturer's Name	offered (e.g Dip in Agric: Animal Production or Dip: Crop Production or Higher	Gender (Female or Male)	(Black, White, Coloured	Age	ο Ρ	Qualification (highest obtained)	ati	experienc e in	e in experience in other
		Certificate in Agric, etc.)	,	Indian)		SA)		on was obtained	teaching	agriculture (if anv)
3.1										
3.2										
ω. ω										
3.4										
ა .5										
3.6										
3.7										
з.8										
3.9										
3.11										
3.12										
3.13										
3.14										
3.15										
3.16										
3.17										





Department of Agriculture