Report on the profiling of the current government-employed extension and advisory service officers 2007

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Report on the profiling of the current government-employed extension and advisory service officers

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Foreword by the Director-General

Ms Njabulo Nduli

I am pleased to present the report on the profile of government-employed extension and advisory service 2007.

The report is a culmination of a commissioned study in 2006. The study was a mechanism to evaluate the state of current extension service against the norms and standards for extension and advisory service.

South Africa inherited a dichotomous extension and advisory service which was differentiated along racial lines with different levels of support and operation. There was a service for white commercial farmers and a service for black subsistence farmers. The two-tiered approach was characterised by inefficiency and poor morale. The situation called for an intervention from the Department of Agriculture and the sector in general.

In order to transform the South African extension service from a dualistic service to a single amalgamated service, the Department of Agriculture conducted a national study on the most feasible extension model for the country in 1998. The process of the study culminated in the development of norms and standards for agricultural extension and advisory service in 2005.

As a baseline for implementing the norms and standards, the Department of Agriculture commissioned a study in 2006 to profile government-employed extension officers in the country. The department needed this information to gain a sense of expertise and capacity levels at its disposal as it developed interventions to improve service delivery. The report is, therefore, a national picture of the status of government-employed extension and advisory officers.

Flowing from May 2007 Lekgotla, the Minister of Agriculture and Land Affairs called for an Extension Indaba. As such, the Extension Indaba was held in March 2008. In the main, the purpose of the Extension Indaba was to create a platform for information-sharing as a mechanism to develop a turn-around strategy for extension and advisory services. It was through this Indaba that ideas were solicited from the delegates on the proposed Extension Recovery Plan.

The norms and standards for extension and advisory service, report on the profile of government-employed extension officers and the recommendations of the Extension Indaba culminated in the DoA Extension Recovery Plan Framework. 2008 saw the DoA together with provincial departments of agriculture implementing the first phase of the Extension Recovery Plan. It is this report on the profile of government-employed extension officers that formed the basis for the National Treasury funding allocation for the implementation of the Extension Recovery Plan as we have it today. It is further hoped that this report will in future be used as a benchmark in measuring the impact of the Extension Recovery Plan.

Njabulo Nduli
DIRECTOR-GENERAL

Executive summary

Beneficiaries of government interventions invariably identified extension and advisory service as the weak link militating against the full impact of government agricultural programmes in the past. In response, the South African government approached the Royal Dutch government to fund a search for an appropriate extension model. The result yielded no single model suitable for the entire country. Nevertheless, the comprehensive process resulted in the development of minimum criteria for agricultural extension and advisory service. The criteria, called the norms and standards, covered aspects such as qualifications, support for extension, information generation and dissemination linkages, the officer:farmer ratio, training interventions and career pathing.

As a baseline for implementing the norms and standards, it became necessary to profile the government-employed extension officer in the country. This study was conducted to obtain a demographic profile of all extension officers in terms of: Name, location (province and municipality), gender, race, age, job level, designation, qualification (and the institution where such qualifications were obtained as well as the year), the major subject associated with that qualification, their scope of work, and to identify training gaps.

The report on the status of government-employed extension and advisory personnel is an attempt to measure the gap between the current capacity and the ideal capacity, as outlined in the norms and standards document.

The data contained in the report were validated by the provinces at a validation workshop on 28 February 2007.

The report in general revealed the following:

- Currently there are about 2 210 extension officers.
- In terms of gender, about 1 608 (73 %) are males and 602 (27 %) are females. Seven out of 9 provinces are male-dominated.
- The province of KwaZulu-Natal shows a commendable 50:50 gender split.
- Provinces with the highest number of extension officers are Limpopo (666), Eastern Cape (623) and KZN (360).
- Gauteng and Northern Cape have the smallest number of extension officers—29 and 23, respectively.
- Generally the provinces show a fair personnel distribution in the age groups 21 to 55 years.
- About 1 772 (80,2 %) of extension officers have a diploma qualification or lower. This is in contrast to norms and standards which require all agricultural advisors to be in possession of a degree qualification or higher. Only 438 (19,8 %) have a degree or higher qualification.
- There are fewer than 250 extension officers out of 2 210 who indicated that they were exposed to generic skills training in computer literacy, communication and project management. The majority of them indicated their involvement in projects related to the Comprehensive Agriculture Support Programme and LandCare.
- Provinces with a good racial mix are the Western Cape and Northern Cape. In all other provinces almost all the extension officers are Africans, who account for 92,57 %.
- The population under the age of 35 is 20 %. This reflects an acceptable staff replacement rate and organisational stability.
- About 75 % of the officers are between salary levels 7 and 8, 15 % is between salary levels 4 and 6, 8 % between salary levels 9 and 10 and about 2 % is above salary level 10.
- Males occupy more than 80 % of management-related positions.
- In 7 out of 9 provinces, female extension officers are more educated than their male counterparts. It is only in Gauteng and Free State where male officials are more educated than their female counterparts.
- In terms of the technical skills programmes completed by the extension officers, 371 had completed a training programme in Animal Production, 241 in Crop Production, 124 in Horticulture, 148 in Business Management, 60 in LandCare and 15 in Mechanisation and Irrigation.
- A total of 55 % officers serve 600 or fewer farmers per individual than is recommended in the norms and standards.

1. Introduction and background

The Department of Agriculture (DoA) inherited a dichotomous Extension Service which was differentiated along racial lines with different levels of support and operation. There was a service for white commercial farmers and a service for black subsistence farmers. The two-tiered format was characterised by inefficiency and poor morale among officials. The situation called for an intervention from the department and the sector in general.

In 1998 the DoA undertook to address this anomaly by initially piloting projects to identify the most appropriate Extension Model for South Africa. The outcome of that process was the development of norms and standards for extension and advisory services. A parallel process of developing new qualifications and unit standards for extension was taking place under the guidance of AgriSETA and the agricultural Standard Generating Body (SGB) for extension and advisory services.

The norms and standards in agricultural extension and advisory services are a response to the problematic legacy of the past wherein extension service was offered as a two-tier package serving commercial and subsistence farmers along racial lines. Numerous government interventions in the agricultural sector were handicapped by an inefficient extension service. With extension being the frontline of the department, its capacity became of paramount concern.

As a mechanism to evaluate the state of current extension service against the norms and standards, the DoA conducted a study in October 2006, profiling the current government-employed agricultural extension and advisory service personnel. The department needed this information to gain a sense of expertise and capacity levels at its disposal as it developed interventions to develop the agricultural sector. The report is, therefore, an initial step towards the repositioning of extension and advisory service in the country.

The delivery of advisory support is highly dependent on human resource capacity and finance. There is an urgent need to improve the human capital resource by focusing on expertise, competence, skills and qualifications to render a high-quality service to our clients. The upgrading of competence and skills must be based on needs assessment. The norms and standards clearly define the expected competencies of extension and advisory service personnel.

The findings from the study make it easy to establish how closely or how far our extension personnel meet the recommended standards. Information on this will shed some light on the extent to which these officers can contribute effectively towards the successful implementation of key government programmes such as CASP, the Integrated Food Security and Nutrition Programme (IFNSP, LandCare, etc.).

The report comprises 14 chapters. Chapters 1 and 2 focus on the introduction and the methodology followed in conducting the study. Chapters 3 to 11 give a profile of extension personnel in each province, starting with the Eastern Cape followed by Free State, Gauteng, KwaZulu-Natal, Limpopo, Northern Cape, North West and Western Cape. Chapter 12 provides the current and ideal ratio of extension officer:farmer. Chapter 13 attempts to paint a national picture of the state of extension, taking into account the norms and standards, employment equity issues, etc. The document concludes with Chapter 14 which aims to provide a list of recommendations for action by both national and provincial departments.

2. Research methodology

2.1 Objectives of the study

Informed by the norms and standards for the agricultural extension and advisory service, the DoA embarked on this study to:

- Assess the extent to which the extension personnel in the field comply with the prescripts of the norms.
- Compile a list of all categories of current extension officers in the country.
- Obtain a demographic profile of all extension officers in terms of name, location (province and municipality), gender, race, age, job level, designation, qualification (and the institution where such qualification was obtained as well as the year), and the major subject associated with this qualification.
- Obtain information about the current official title and function of the officer.
- Gain an understanding of the scope of work for all extension officers, including the specific programmes and partnerships they are supporting.
- Identify training gaps in all officers' repertoire.

2.2 Method of data collection

A population survey was used as the method of data collection. A questionnaire was developed to collect data from the 9 provinces. Apart from the questionnaires, the Human Resource Management directorates from each province were approached to supply human resource (HR) data on all extension officers. This information was required in terms of gender, age, years of service, educational qualifications, employment level and/or rank. Questionnaires were sent both electronically and as hard copies to senior managers of Extension Service and Human Resources directorate managers. These were then distributed to district managers responsible for extension service ground level. Some of the provinces were visited physically, particularly during the collection of questionnaires. Provinces also used couriers to send completed questionnaires back. The data analysed below were captured and collated from completed questionnaires and HR data from each province.

2.3 Study area

The study included all the extension personnel or workers as determined by the province.

2.4 Reliability and validity of information

To ensure the reliability of the collected information from the province, the data collected through questionnaires were counter-checked against data obtained from the respective HR data on the extension officers.

2.5 Relevance of the study

Secondary data were collected through Internet search, especially information on provincial growth and development strategies and provincial departments' strategic plans. The information was of assistance in understanding the scope and function of extension and advisory service in each province. Collecting secondary data using the already-outlined methods was necessary to establish whether the current extension machinery had the requisite capacity to support government priority programmes.

2.6 Data analysis

The collected raw data were tabulated by gender, race, age, and other attributes as indicated in the objectives and then formatted using MS Excel and MS Word programs.

2.7 Limitations of the study

Some of the questionnaires were not filled in adequately and in some instances there was evidence that one officer had filled in the questionnaire on behalf of others.

The other limiting factor is that extension officers themselves do not seem to have adequate information on their clients, including their core business. In a nutshell, it can be stated that extension officers have no clear records of their customer base.

Data contained in the study do not provide information on the vacancies in the provinces and the capacity of the national department to guide and coordinate extension, as suggested in the norms and standards.

3. Eastern Cape

3.1 Introduction

The Eastern Cape is 168 966 km^2 in extent and is one of the poorest provinces. It is the country's second largest province after the Northern Cape, comprising 13,9 % of South Africa's land area and with a population of 2,9 million people. About 1,22 million of this population are food insecure (Eastern Cape Provincial Department of Agriculture Strategic Plan, 2006).

The Eastern Cape is a centre of learning and it has 4 universities, namely: Walter Sisulu University, Fort Hare, Nelson Mandela Metropolitan University and Rhodes. There are 2 Colleges of Agriculture, Fort Cox and Tsolo. Agricultural training is offered at 2 universities, Fort Hare University and Nelson Mandela Metropolitan University, while Rhodes has a Social Research Unit for the investigation of the social aspects of development.

The most widely-spoken language in the province is isiXhosa, followed by English and Afrikaans. The Provincial Department of Agriculture is organised into 6 regional offices that are attached to 6 district municipalities. These are Cacadu, Chris Hani, Ukhahlamba, Alfred Nzo, OR Tambo and Amathole. The zoning of management of the department follows the district municipality.

3.2 General profile of agriculture in the Eastern Cape

Agriculture is important, coming second after motor assembly in contributing to the local economy. Of the 168 966 km^2 in total area, the province has some 270 000 state land on which new farmers are settled. This requires presettlement planning and post-settlement servicing in the form of farmer training, monitoring and infrastructural development. The farming population figures are estimated at 15 200 subsistence farmers (Land Redistribution for Agricultural Development/SLAG). It should be noted that there is a total of 57 000 that own or have access to a piece of land measuring at most 200 m^2, which source information or assistance from the extension service at some point.

Broken topography precludes agronomic industries on a large scale. Additionally, highly acidic soils on the eastern seaboard areas of Pondoland pose a debilitating challenge to optimal utilisation of the land. Nevertheless, the following crops are cultivated:

Field: Maize, lucerne, beans, pumpkins, watermelons and potatoes
Vegetables: Cabbage, tomatoes, onion, spinach and carrots
Fruit: Peaches, oranges, lemons, apricots, guava, bananas and avocado
High value: Sunflower, chicory, sugar beet, olives, hemp, flax, tea and sugar cane.

The pineapple production extends from the Bathhurst-Alexandria-Grahamstown triangle in the west to East London in the east.

Tea is an important commodity farmed at Magwa (Lusikisiki) and Majola (Port St Johns).

An olive nursery in Alice has been developed in collaboration with the University of Fort Hare to form a nucleus of olive production in the Eastern Cape.

The potential for forestry is very good, with indigenous trees dotted on the southern aspects of the landscape. Equally good are opportunities for biodiversity conservation with the Tsitsikamma National Park being an example of an expansive dense indigenous forest which is home to many bird and animal species.

The shoreline links to a useful fishing industry, with squid forming the basis of the province's fishing industry and some recreational and commercial fishing for line fish, the collection of marine resources, and access to line-catches of hake.

Small stock production is the main farming activity in the central, southwest and western half of the province, with mixed farming dominating the rest of the province.

3.3 Extension and advisory service

There are a number of potential agribusiness opportunities which call for input of extension and advisory service personnel. These are fruit processing, maize milling, meat deboning, meat processing, and juice/milk processing, tanneries and taxidermy.

These interventions will be directed mainly at improving the quality of life of those operating in this sector and redressing the inequalities created by the past. There are about 623 extension officers in the employment of the Eastern Cape Provincial Department of Agriculture.

The effort at reforming extension service will have to align training interventions with the provincial flagship projects in order to optimise the effect of the capacitation. This implies that soft skills are as much in demand as core skills.

3.4 Profile of extension officers

The data are tabulated by age, race, education and training, employment levels, including job title and experience in the field. The above variables will be presented by means of tables ranging from Tables 3.1 to 3.8.

TABLE 3.1 Profile of extension officers by age and gender, n = 623

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
<35	86	66	152	24,3
36–45	231	66	297	47,6
46–55	127	75	132	21,1
56–65	42	0	42	6,7
Total	**486**	**137**	**623**	**100,0**

Source: Questionnaires and HR data

The results indicate that the vast majority of extension officers are in the age group of 36 to 45 years, followed by those under 35 years, the 46 to 55 year olds and, lastly, the 56+ group. In short, this is an age distribution which indicates a stable population. In terms of gender, males are in the majority, with 486 (78 %) out of 623 officers.

In Table 3.2 a race and gender profile of extension officers is presented.

TABLE 3.2 Race and gender profile of extension officers, n = 623

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	475	136	611	98,1
Whites	11	1	12	1,9
Total	**486**	**137**	**623**	**100,0**

Source: Questionnaires and HR data

Information in Table 3.2 depicts that the majority of officials are Africans, constituting 611 (98,1 %) out of 623. Based on the dominance of African extension officers, it is obvious that both African males and females are in the majority.

A profile of extension officers by qualifications and gender is presented in Table 3.3.

TABLE 3.3 Profiles of extension officers by qualifications and gender, n = 623

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	3	0	3	0,5
Diploma	451	115	566	90,8
Degree	26	16	42	6,7
Postgraduate	6	6	12	1,9
Total	**486**	**137**	**623**	**100,0**

Source: Questionnaires and HR data

Table 3.3 depicts that only 54 (8,7 %) of the extension officers have a degree or higher qualification, while an overwhelming majority of 90,8 % are diplomates. Therefore, 9 out of 10 extension officers in the province fall

below the norm to be appointed as agricultural advisors. In terms of gender, 22 (16,7 %) out of 137 females have degree or higher qualifications compared to 32 (6,7 %) of males.

TABLE 3.4 Profile of extension officers by age and qualifications, n = 623

Age	Qualification				Total	
	Matric (No.)	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	0	132	18	2	152	24,3
36–45	0	269	20	8	297	47,6
46–55	1	128	1	2	132	21,1
56–66	2	37	3	0	42	6,7
Total	**3**	**566**	**42**	**12**	**623**	**100,0**

Source: Questionnaires and HR data

In terms of Table 3.4, the majority of officers with degree qualifications were under the age of 46. In terms of those with a diploma, no significant difference in age categories could be found.

In Table 3.5 a profile of extension officers in terms of age and job level is presented.

TABLE 3.5 Profile of extension officers by age and job level, n = 623

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	147	2	3	0	152	24,3
36–45	57	212	13	15	297	47,6
46–55	0	116	16	0	132	21,1
56–66	1	25	14	2	42	6,7
Total	**205**	**355**	**46**	**17**	**623**	**100,0**

Source: Questionnaires and HR data

There is a parallel between age and the job level of officials. The same correlation also appears when tabulated by job title in Table 3.5. Consequently, this is also true for age and salary level. It can be concluded, therefore, that this correlation, though positive and high, is not perfect, suggesting that a system of sifting is used to effect progression.

In Table 3.6 a profile of extension officers is analysed in terms of job title and gender.

TABLE 3.6 Profile of extension officers by job title and gender, n = 623

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Senior Agricultural Development Technician	14	4	18	2,9
Chief Agricultural Development Technician	310	58	368	59,1
Control Agricultural Technician	45	1	46	7,3
Agricultural Advisor	96	62	158	25,4
Assistant Manager	2	1	3	0,5
Coordinators	12	7	19	3,0
Managers	7	4	11	1,8
Total	**486**	**137**	**623**	**100,0**

Source: Questionnaires and HR data

Table 3.6 depicts that the majority of extension officers occupy the rank of Chief Agricultural Development Technician, which constitutes 368 (59 %), followed by agricultural advisors who constitute 158 (25 %). Out of

623, only 98 extension officers are sharing the following positions: Control Agricultural Technician, Coordinator, Senior Manager, Manager, Senior Agricultural Technician and Assistant Manager.

In terms of gender, males have dominated all job categories indicated in Table 3.6 above.

In Table 3.7 a profile of extension officers in terms of salary level and gender is presented.

TABLE 3.7 Profile of extension officers by salary level and gender, n = 623

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	117	89	206	33,1
7–8	317	38	355	56,9
9–10	44	1	45	7,2
11–13	8	9	17	2,7
Total	**507**	**137**	**623**	**100,0**

Source: Questionnaires and HR data

Table 3.7 depicts that the majority of extension officers are on salary levels 7–8, constituting 355 (56,9 %), followed by levels 4–6 constituting 205 (32,9 %), followed by 9–10 constituting 46 (7,2 %) and the last one is salary levels 11–12, which constitutes 17 (2,7 %). The trend seems to be normal, although one would expect the entry level to have the highest number. The latter may be influenced by work experience.

In terms of gender, males have dominated salary levels 4–6, 7–8 and 9–10. Females are slightly in the majority, mainly as coordinators, when it comes to salary levels 11–12.

A profile of extension officers in terms of years of experience and gender is presented in Table 3.8.

TABLE 3.8 Profile of extension officers by years of experience and gender, n = 623

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
< 5	96	81	177	28,4
6–10	95	16	111	17,8
11–20	107	40	147	23,6
21–30	156	0	156	25,0
31–40	32	0	32	5,0
41–50	0	0	0	0,0
Total	**486**	**137**	**623**	**100,0**

Source: Questionnaires and HR data

Table 3.8 depicts that the majority of extension officers have 5 or fewer years of working experience which constitute 177 (28,4 %), followed by 21–30 years constituting 156 (25,0 %), followed by 11–20 constituting 147 (23,6 %), followed by 6–10 constituting 111 (17,8 %), while the last 30 and above constitute 31(4,9 %). In terms of gender, no females have experience of more than 20 years while there are about 188 males with more than 20 years' experience.

4. Free State

4.1 Introduction

The Free State is roughly 129 480 km^2 in its total area. It is the country's third largest province. In this province 6,4 % of the national population reside here and it contributes 4,9 % of the country's Gross Domestic Product (GDP). The Free State is relatively large in physical area, but small in population size and GDP contribution. The economy of the Free State Province contributes slightly less towards the South African economy, considering the relative size of the provincial population. This would suggest that the provincial economy is currently "underperforming."

The province has the University of the Free State, the Central University of Technology and Glen College of Agriculture to support agricultural education and training.

Physically, the Free State is situated on the flat boundless plains in the heart of SA. The western part of the province consists of plains, with pans as an important hydrological feature. The eastern part is mountainous. The Maluti range along the border is connected to the Drakensberg on the border with KwaZulu-Natal. The Free State is almost treeless, consisting mainly of grasslands with some Karoo vegetation in the south.

In terms of governance, the province is divided into 5 districts. These are: Northern Free State, Thabo Mofutsanyane (in the East), Motheo (in the South East), Xhariep (in the South) and Lejweleputswa (in the North West).

4.2 General profile of agriculture in the province

The province is in the process of addressing a structural framework defect for the sector. Previous agricultural sector strategies tended to have varied between maximising agricultural growth through promoting commercial crops and emphasising food production/self-sufficiency and import substitution. There are, however, various strategies to improve this sector, e.g. agriculture diversification and agriculture beneficiation (agribusiness).

In terms of economic development at the Free State district and local levels, agriculture diversification is seen as a livelihood-coping strategy for the farmer; increasing profits through new products such as olives, organic farming and essential oils; broadening the local export base; and the creation of additional employment opportunities. Agriculture diversification also has indirect benefits on the secondary sector. Opportunities are now created in the agro-industrial sector in terms of packaging and value-adding, which create even more employment opportunities.

The soil is rich and the climate is good, allowing a thriving agricultural industry. The Free State is a summer-rainfall region and is extremely cold during the winter months, especially towards the eastern mountainous regions where temperatures can drop as low as –9,5 °C. The western and southern areas are semidesert. The mean annual rainfall is 532 mm.

Of the province's cherry crop, 90 % is produced in the Ficksburg district, while the 2 asparagus factories are also situated in this district. Soya, sorghum, sunflower and wheat are cultivated, especially in the eastern Free State, where farmers specialise in seed production. About 40 % of the country's potato production comes from high-lying areas of the Free State.

4.3 Extension and advisory service

Extension in the province is geared to support beneficiaries of land reform through programmes such as CASP, Integrated Food Security and Nutrition Programme (IFNSP) and Biofuels.

4.4 Profile of extension officers

The profile of the extension officers will be presented using tables in terms of age, race, education and training, employment levels, including job titles and the years of experience in the field. These will range from Tables 4.1 to 4.8.

TABLE 4.1 Profile of extension officers by age and gender, n =70

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
<35	17	8	25	35,7
36–45	21	9	30	42,9
46–55	8	3	11	15,7
56–65	4	0	4	5,7
Total	**50**	**20**	**70**	**100,0**

Source: Questionnaires and HR data

Table 4.1 indicates that the majority of extension officers are 45 years and younger. In effect, 94 % of the officers are younger than 55 years. In terms of gender, males outnumber females.

In Table 4.2 a profile of extension officers in terms of race and gender is presented.

TABLE 4.2 Race and gender profile of extension officers, n = 70

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	37	18	55	78,6
Coloureds	1	0	1	1,4
Whites	13	1	14	20,0
Total	**51**	**19**	**70**	**100,0**

Source: Questionnaires and HR data

Table 4.2 depicts that 55 (79 %) out of 70 are Africans, followed by Whites with 14 (20 %) and one Coloured (1,4 %). Owing to skewed racial representation, it is not surprising to find that the majority of males and females are Africans.

A profile of extension officers in terms of qualifications and gender is represented in Table 4.3.

TABLE 4.3 Profile of extension officers by qualifications and gender, n = 70

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	4	0	4	5,7
Diploma	15	8	23	32,9
Degree	22	8	30	42,9
Postgraduate	9	4	13	18,6
Total	**50**	**20**	**70**	**100,0**

Source: Questionnaires and HR data

Table 4.3 illustrates that 62 % of officials have a B degree or higher qualification, as opposed to 39 % with a diploma or lower qualification. It is therefore concluded that the majority of extension officers in the province will qualify to be classified as agricultural advisors, as indicated in the norms and standards document.

In terms of gender, 12 (17,1 %) out of 20 females have a degree or higher qualification compared to 31 (44,3 %) out of 50 males.

A profile of extension officers in terms of age and qualifications is presented in Table 4.4.

TABLE 4.4 Profile of extension officers by age and qualifications, n = 70

Age	Qualification				Total	
	Matric (No.)	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	1	5	12	7	25	35,7
36–45	2	13	7	4	27	38,6
46–55	1	4	8	2	14	20,0
56–65	0	1	3	0	4	5,7
Total	**4**	**23**	**30**	**13**	**70**	**100,0**

Source: Questionnaire and HR data

In terms of information in Table 4,4, the majority of officials with degree or higher qualifications are under the age of 56. In terms of those with a diploma qualification or lower, the majority of them are also under the age of 56. The latter can be attributed to the fact that the province has fairly young extension personnel.

TABLE 4.5 Profile of extension officers by age and salary levels, n = 70

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	1	24	0	0	25	35,7
36–45	9	17	3	2	30	42
46–55	0	5	5	0	11	15,7
56–65	0	2	2	0	4	5,7
Total	**10**	**48**	**10**	**2**	**70**	**100,0**

Source: Questionnaires and HR data

Table 4.5 shows the correlation between age and salary level, with the majority being found in the 21 to 45 age bracket and on salary levels 7–8.

In Table 4.6 a profile of extension officers is presented in terms of job title and gender.

TABLE 4.6 Profile of extension officers by job title and gender, n = 70

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Development Technician	12	7	19	27,1
Senior Agricultural Technician	13	4	17	24,3
Agricultural Scientist	12	8	20	28,6
Senior Agricultural Scientist	9	0	9	12,9
Assistant Director	2	1	3	4,3
Deputy Director	1	0	1	1,4
Director	0	1	1	1,4
Total	**49**	**21**	**70**	**100,0**

Source: Questionnaires and HR data

Information in Table 4.6 shows a general spread of officials between those classified as technicians and those as scientists. There is a strong balance in terms of gender at management level.

A profile of extension officers in terms of salary level and gender is presented in Table 4.7.

TABLE 4.7 Profile of extension officers by salary level and gender, n = 70

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	5	5	10	14,3
7–8	35	13	48	68,6
9–10	9	1	10	14,3
11–13	1	1	2	2,9
Total	**50**	**20**	**70**	**100,0**

Source: Questionnaires and HR data

Table 4.7 again follows the trend shown in the preceding tables. Earning levels correspond to the entry ranks and so does experience in Table 4.8. This depicts a normal organisational structure.

TABLE 4.8 Profile extension officers by years of experience and gender, n = 70

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	21	10	31	44,3
6–10	16	4	20	28,6
11–20	6	4	10	14,3
21–29	5	1	6	8,6
≤30	3	0	3	4,3
Total	**50**	**20**	**70**	**100,0**

Source: Questionnaires and HR data

In terms of experience, the majority of extension officers have fewer than 10 years of work experience. The latter could be linked to the findings in Table 4.1 whereby the majority of officials were relatively young.

5. Gauteng

5.1 Introduction

Gauteng is the smallest and the richest province in South Africa. It is situated in the north-eastern part of the country, and is landlocked, bordered by Limpopo in the north, Mpumalanga in the east, Free State in the south, and North West in the west. Gauteng has an average population density of 513 persons per km^2, making it the most densely populated province. The main languages spoken are isiZulu (21 %), Afrikaans (14 %), Sesotho (13 %), and English (12 %).

About 8,8 million people live in Gauteng, a figure that accounts for 19,4 % of South Africa's population (ASSA Estimates, 2000). Gauteng has several tertiary institutions with an agricultural bias in the subjects offered and these are Tshwane University of Technology, the University of Pretoria and the University of South Africa (Florida Campus).

Gauteng contributes more than 38 % of the country's Gross Domestic Product (GDP) as well as 60 % of its fisical revenue. Indeed, Gauteng generates 9 % of the GDP of the entire African continent.

Administratively, Gauteng is demarcated into 6 district municipalities, namely Johannesburg, West Rand, Tshwane, Metsweding, Ekurhuleni and Sedibeng.

5.2 General profile of agriculture in Gauteng Province

The Gauteng climate is mostly consistent, however, temperatures between Pretoria and Johannesburg tend to vary by about 2 °C, of which Pretoria is the warmer of the two. Gauteng does offer the perfect weather conditions with summer being warm and windfree, while winters are chilly and very cold at night, however, with clear skies during the day.

Despite Gauteng being mainly an urban province, the Gauteng Agricultural Sector is geared to providing the cities and towns with daily fresh produce, including vegetables, fruit, meat, eggs, dairy products and flowers. There are approximately 2 206 commercial farming units in Gauteng Province (*Statistics South Africa: Census 2002*).

The largest contributors to the province's gross geographic product are manufacturing, finance, mining and trade.

5.3 Extension and advisory service

The Provincial Department of Agriculture in Gauteng is committed to the promotion of sustainable agriculture through a multidimensional, participatory approach in the execution of the following 5 subprogrammes: household food security, poverty alleviation, farmer settlement and support, established agricultural sector and specialised support services. There are about 29 extension officers in the employment of the Gauteng Provincial Department of Agriculture.

The main role of extension officers in the Gauteng Province is to optimise the contribution of sustainable agriculture towards the equitable development of all communities and the economy in the province in order to enhance food security, income generation, job creation and the quality of life. They are also expected to assist in the implementation, monitoring and evaluation of government priority programmes such as CASP.

5.4 Profile of extension officers

The profile of extension officers will be analysed using the following variables: age, race, education and training, employment levels including job title and their experience in the field. Information will be presented by means of tables ranging from Tables 5.2 to 5.8.

TABLE 5.1 Profile of extension officers by age and gender, n = 29

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
<35	12	12	24	82,7
36–45	4	0	4	13,7
46–55	1	0	1	3,4
56–65	0	0	0	0
Total	**17**	**12**	**29**	**100,0**

Source: Questionnaires

Information in Table 5.1 depicts that the majority of extension officers are 45 years and younger and there are none above the age of 55. There is a reasonable gender balance between male and female, although there is still room for improvement.

In Table 5.2 a race and gender profile of extension officers is presented.

TABLE 5.2 Race and gender profile of extension officers, n = 29

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	15	12	27	93,1
Whites	2	0	2	6,9
Total	**17**	**12**	**29**	**100,0**

Source: Questionnaires

Based on the information in Table 5.2, 27 (93,1 %) out of 29 extension officers are Africans. The majority of both males and females are therefore Africans.

Table 5.3 presents the profile of extension officers in terms of qualifications and gender.

TABLE 5.3 Profiles of extension officers by qualifications and gender, n = 29

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	0	0	0	0
Diploma	5	2	7	24,1
Degree	7	6	13	44,8
Postgraduate	5	4	9	31
Total	**17**	**12**	**29**	**100,0**

Source: Questionnaires

Information in Table 5.3 illustrates that about 22 (75,9 %) out of 29 extension officers have a degree or higher qualification. In terms of gender, 10 (83,3 %) out of 12 females are in possession of a degree or higher qualification, as compared to 12 (70,6 %) out of 17 males.

Extension officers are further profiled in terms of age and qualifications in Table 5.4

TABLE 5.4 Profile of extension officers by age and qualifications, n = 29

Age	Qualification			Total	
	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	5	11	9	25	86,2
36–45	2	1	0	3	10,3
46–55	1	1	0	1	3,4
56–66	0	0	0	0	0
Total	**8**	**13**	**9**	**29**	**100,0**

Source: Questionnaires

In terms of information in Table 5.4, the majority of extension officers with degree qualifications or higher are 45 years old or younger.

In Table 5.5 a profile of extension officers in terms of age and job level (salary level) is presented.

TABLE 5.5 Profile of extension officers by age and job level, n = 29

Age	Salary level			Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	No.	%
21–35	2	17	6	25	86,2
36–45	0	1	2	3	10,3
46–55	0	0	1	1	3,4
56–66	0	0	0	0	0
Total	**2**	**18**	**9**	**29**	**100,0**

From the findings in Table 5.5, there is no significant difference between employee salary and age. It is worth noting that none of the employees responsible for extension in the province occupy a job level (salary level) above 10. This may imply that extension service in the province is part of a broader directorate, i.e. there is no directorate or subdirectorate responsible for extension in the province.

Profile of extension officers in terms of job title and gender is presented in Table 5.6.

TABLE 5.6 Profile of extension officers by job title and gender, n = 29

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Officers	0	2	2	6,9
Community Officers	13	8	21	72,4
Development Officers	3	1	4	13,8
Principal Agricultural Scientist	1	1	2	6,9
Total	**17**	**12**	**29**	100,0

Source: Questionnaires

Table 5.6 indicates that the majority of officials occupy the rank of Community Officer, constituting 21 (72,4 %), followed by Development Officer constituting 4 (13,8 %), followed by Principal Agricultural Scientist and Agricultural Officer which constitute 1 (6,9 %). Given the proposed new job title, the majority of the province extension personnel can easily be classified as agricultural advisors and subject matter specialists, based on their academic qualifications.

A general profile of extension officers in terms of salary level and gender is presented in Table 5.7

TABLE 5.7 Profile of extension officers by salary level and gender, n = 29

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	2	0	2	6,8
7–8	8	10	18	62
9–10	7	2	9	31
11–13	0	0	0	0
Total	**17**	**12**	**29**	**100,0**

Source: Questionnaires

Table 5.7 depicts that the majority of extension officers are on salary levels 7–8, followed by 9–10 and 4–6. In terms of gender, males dominate in all salary levels except levels 7–8 where females are in the majority, with 10 out of 18 officers in this level.

A profile of extension officers in terms of years of experience is presented in Table 5.8.

TABLE 5.8 Profile of extension officers by years of experience and gender

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	8	5	13	44,8
6–10	6	7	13	44,8
11–20	3	0	3	10,3
21–29	0	0	0	0
≤30	0	0	0	0
Total	**17**	**12**	**29**	**100,0**

Source: Questionnaires

In terms of experience, 26 out of 29 officials have fewer than 10 years of field experience. This is not surprising, as it was reflected in Table 5.1 that 82,7 % of the officials are 35 years old or younger.

6. KwaZulu-Natal

6.1 Introduction

KwaZulu-Natal has more than 9,6 million people living on 92 100 km^2 of land (*Mid-year estimates*, 2005). The principal language spoken is isiZulu, followed by English and Afrikaans.

The province boasts several institutions of higher learning with a bias towards agriculture and these include the University of KwaZulu-Natal, University of Zululand, Mangosuthu Technikon, Cedara and Owen Sitole Colleges of Agriculture.

A total of 21,9 % of the province's population aged 20 and above have received no formal education (*Census 2001*).

Physically, the province has 3 different geographic areas: the lowland region along the Indian Ocean, plains in the central region, and two mountainous areas—the Drakensberg and the Lebombo mountains.

The climate of the coastal areas is humid and subtropical. It changes as one moves further north to become tropical. KwaZulu-Natal is demarcated into 11 districts and these are eThekwini Metropolitan Municipality; Amajuba, Zululand, Umkhanyakude, uThungulu, Umzinyathi, uThukela, uMgungundlovu, iLembe, Ugu and Sisonke.

6.2 General profile of agriculture in KZN Province

The department, through its vision and mission statements, is addressing the huge challenges facing, mainly in developing the agricultural and natural resources in order to realise the vast agricultural potential of the province. This it does *via* a set of strategic objectives, namely to:

- Provide effective management of advisory services.
- Deliver results that impact on agricultural development and food security.
- Ensure globally competitive agricultural production by providing targeted and relevant market information.
- Ensure farmer succession (subsistence to commercial).

The province's current agricultural trademark commodities include the sugar-cane plantations and subtropical fruit, vegetables, dairy and live stock-farming in the interior. Another major source of income is forestry in the areas around Vryheid, Eshowe, Richmond and Harding.

6.3 Extension and advisory service

The provincial extension and advisory service remains the means through which the agricultural development will be brought to fruition and the objectives met. The training and development of this function has to be seen in this context. Extension and advisory service personnel are utilised to direct provincial flagship programmes such as Siyavuna, CASP and LandCare.

6.4 Profile of extension officers

The profile of extension officers will be analysed in terms of age, gender, race, education and training, employment levels, including job titles and their years of experience in the field. The information will be presented in Tables 6.1 to 6.8.

TABLE 6.1 Profile of extension officers by age and gender, n = 360

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥35	59	53	112	31,1
36–45	64	101	165	45,8
46–55	52	24	76	21,1
56–65	5	2	7	1,9
Total	**180**	**180**	**360**	**100,0**

Source: Questionnaires and HR data

There is a fairly even distribution of officials in terms of age and the majority are under the age of 56. In terms of gender, there is a 50:50 division. The province should be commended for a good gender balance.

In Table 6.2 a race and gender profile of extension officers is presented.

TABLE 6.2 Race and gender profile of extension officers

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	178	180	358	99,9
Indians	1	0	1	0,27
Whites	1	0	1	0,27
Total	**180**	**180**	**360**	**100,0**

Source: Questionnaires and HR data

Data in Table 6.2 depict that 358 (99,4 %) out of 360 extension officers are Africans. The 2 other officials are White and Indian. Therefore, African males and females dominate in terms of race profile.

Table 6.3 presents the profile of extension officers in terms of qualifications and gender.

TABLE 6.3 Profile of extension officers by qualifications and gender, n = 360

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	20	39	59	16,4
Diploma	143	123	266	73,9
Degree	17	18	35	9,7
Postgraduate	0	0	0	0
Total	**180**	**180**	**360**	**100,0**

Source: Questionnaires and HR data

Information in Table 6.3 paints a gloomy picture of the education qualifications of extension officers in the province, as only 35 (9,7 %) out of 360 have degree qualifications. The rest have lower qualifications and can be classified as development officers in terms of the norms and standards document, but not as agricultural advisors. In terms of gender, 18 (10 %) out of 180 females have a degree qualification, as compared to 17 (9,4 %) out of 180 males.

In Table 6.4 a profile of extension officers is presented in terms of age and qualifications. The purpose is to establish whether there is any strong relationship between age and qualification levels of personnel. This will assist in designing skills development interventions.

TABLE 6.4 Profile of extension officers by age and qualifications, n = 360

Age	Qualification			Total	
	Matric (No.)	Diploma (No.)	Degree (No.)	No.	%
21–35	1	95	16	112	31,1
36–45	38	118	9	165	45,8
46–55	18	48	10	76	21,1
56–65	2	5	0	7	1,9
Total	**59**	**266**	**35**	**360**	**100,0**

Source: Questionnaires and HR data

In terms of information in Table 6.4, all the extension officers with a degree qualification are under the age of 56. The same applies to those with diploma and lower qualifications.

In Table 6.5 a profile of extension officers in terms of age and job (salary) level is presented.

TABLE 6.5 Profile of extension officers by age and salary levels, n = 360

Age	Salary levels			Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	No.	%
21–35	2	110	0	112	31,1
36–45	40	122	3	165	45,8
46–55	17	58	1	76	21,1
56–65	2	5	0	7	1,9
Total	**61**	**295**	**4**	**360**	**100,0**

Source: Questionnaires and HR data

From the findings in Table 6.5, there is no significant difference between the salary level of officials and age, except for salary levels 9–10 where all the officials are older than 35.

A profile of extension officers in terms of job title and gender is presented in Table 6.6.

TABLE 6.6 Profile of extension officers by job title and gender, n = 360

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Technician	19	42	61	16,9
Senior Agricultural Technician	50	58	108	30,0
Agricultural Scientist	96	65	161	44,7
Senior Agricultural Scientist	11	15	26	7,2
Assistant Director	4	0	4	1,1
Total	**180**	**180**	**180**	**100,0**

Source: Questionnaires and HR data

Table 6.6 indicates that the majority of officials occupy the rank of Agricultural Scientist. None of the officials occupies the rank of Deputy Director or higher. The latter suggests that extension service is part of a broader subdirectorate, not a directorate.

A general profile of extension officers based on salary level and gender is presented in Table 6.7. The intention is to establish whether there are any disparities associated with gender.

TABLE 6.7 Profile of extension officers by salary level and gender, n = 360

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	19	42	61	16,9
7–8	157	138	295	81,9
9–10	4	0	4	1,1
Total	**180**	**180**	**360**	**100,0**

Source: Questionnaires and HR data

There is no significant difference between gender and salary levels 4–8. The only exception is for officials on salary levels 9–10, where all the officials are male.

A profile of extension officers in terms of years of experience is presented in Table 6.8.

TABLE 6.8 Profile of extension officers by years of experience and gender, n = 360

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	38	36	74	20,6
6–10	42	47	89	24,7
11–20	58	82	140	38,9
21–29	34	14	48	13,3
≤30	8	1	9	2,5
Total	180	180	360	100,0

Source: Questionnaires and HR data

In terms of information in Table 6.8, there is a general spread of experience across the genders. However, it is worth noting that, although the province has many well-experienced people, none of them is appointed on salary levels 9–10, as reflected in Table 6.7.

7. Limpopo

7.1 Introduction

Limpopo is the fifth largest (and fifth smallest) of the country's 9 provinces, taking up 10,3 % of South Africa's land area and with a mid-2006 population of 5,4 million people. The province has the largest proportion of schoolgoing and young adults than any province in the country. These account for 62,2 % of the population.

Among the treasures of the province is the Mapungubwe site which is located in the planned Golden Horseshoe. This attempts to create a single reserve that arches from the Kruger National Park in the east to Botswana in the west.

The province has the University of Limpopo, the University of Venda, Madzivhandile and Tompi Seleka Colleges of Agricultural as centres for academic agricultural training.

In terms of municipality demarcation, the province is divided into 5 districts, namely: Capricorn, Mopani, Sekhukhune, Vhembe and Waterberg.

7.2 General profile of agriculture in Limpopo Province

The province is endowed with abundant agricultural resources and is one of the country's prime agricultural regions noted for the production of livestock, fruit and vegetables, cereal and tea.

Three distinct climatic regions can be identified in the province, these being the lowveld which is arid and semi-arid, the highveld which is also a semi-arid region, and the escarpment with a subhumid climate. The rainfall in the escarpment is in excess of 700 mm per annum.

Nevertheless, the most limited resource in the province is water. There is potential for about 137 000 ha for irrigation, of which 58 000 are in the hands of African farmers.

The province has diverse soils which vary in productivity. Those soils are also vulnerable to various forms of degradation—both physically, chemically and biologically, something that calls for astute strategic interventions. Normally, according to nominal soil characteristics, the climate and topography, the land capacity categorisation constitutes the following proportions:

- **37 % suitable for arable farming**. (Sunflowers, cotton, maize and groundnuts are cultivated in the Bela-Bela and Modimolle areas. Additionally, table-grape crops, tropical fruit such as bananas, litchis, pineapples, mangoes and papayas, as well as a variety of nuts, are grown in the Tzaneen and Makhado areas. Tzaneen is also at the centre of extensive tea and coffee plantations.) ZZ2 Farming Operation is the largest tomato farm in South Africa and lies between Tzaneen and Makhado. Overall, the province produces about 75 % of South Africa's mangoes, 65 % of its papayas, 36 % of its tea, 25 % of its citrus, bananas, and litchis, 60 % of its avocados, 60 % of its tomatoes, 285 000 tons of potatoes and 35 % of its oranges.
- **50,1 % suitable for grazing**. (Limpopo is in the savannah biome, an area of mixed grassland and trees generally known as bushveld. A summer-rainfall region, the northern and eastern areas are subtropical, with hot and humid summers and mist in the mountains. Winter is mild and mostly frostfree. The bushveld is cattle country, where extensive ranching operations are often supplemented by controlled hunting.) The province produces about 75 % of South Africa's mangoes, 65 % of its papayas, 36 % of its tea, 25 % of its citrus, bananas, and litchis, 60 % of its avocados, 60 % of its tomatoes, 285 000 tons of potatoes, 70 % of its mangoes and 35 % of its oranges.
- **12,2 % suitable for wildlife**. (About 80 % of South Africa's hunting industry is found in Limpopo.)

More than 45 % of the R2 billion annual turnover of the Johannesburg Fresh Produce Market comes from Limpopo.

7.3 Extension and advisory service

Extension and advisory service is expected to support the Provincial Growth and Development Strategy. Based on the province value chain and municipality capacity strengthening approach, extension is expected to support the implementation of CASP and other government priority programmes adopting this approach.

7.4 Profile of extension officers by age and qualifications

There are about 666 extension officers in the employment of the Provincial Department of Agriculture. The profile of extension officers will be tabulated by age, gender, race, education and training, employment levels, including job titles and the years of experience in the field. The results are presented in Tables 7.1 to 7.8.

TABLE 7.1 Profile of extension officers by age and gender, n = 666

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥35	16	11	27	4
36–45	260	106	366	54,9
46–55	188	22	210	31,5
56–65	63	0	63	9,4
Total	**527**	**139**	**666**	**100,0**

Source: Questionnaires and HR data

In terms of information in Table 7.1, the majority of extension officers, with 527 (79,1 %) out of 666, are male. When it comes to age, there are no females older than 55, while 63 of the male officers are older than 55. In terms of gender balance, 527 (79,1%) of extension officers are male.

In Table 7.2 a race and gender profile of extension officers is presented.

TABLE 7.2 Race and gender profile of extension officers, n = 666

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	519	139	658	98,8
Whites	8	0	8	1,2
Total	**527**	**139**	**666**	**100,0**

Source: Questionnaires and HR data

About 98,8 % of the extension personnel in the province are Africans. This demonstrates a highly skewed racial population performing this function in the province.

TABLE 7.3 Profile of extension officers by qualifications and gender, n = 666

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	4	0	4	0,6
Diploma	414	99	513	77
Degree	77	35	112	16,8
Postgraduate	32	5	37	5,5
Total	**527**	**139**	**666**	**100,0**

Source: Questionnaires and HR data

Table 7.3 shows that 77 % of all extension officers are in possession of diplomas as their highest qualification, whereas 20 % have degrees or postgraduate qualifications. In terms of gender, 40 (28,8 %) out of 139 females are in possession of a degree or higher qualification, as compared to 109 (20,7 %) out of 527 males.

In Table 7.4 a profile of extension officers is presented in terms of age and qualifications. The purpose is to establish whether there is any significant relationship between the age and educational levels of officials. The latter will assist in the formulation of training interventions.

TABLE 7.4 Profile of extension officers by age and qualifications, n = 666

Age	Qualification				Total	
	Matric (No.)	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	0	7	11	9	27	4
36–45	1	262	76	15	354	53
46–55	0	194	23	6	223	33,4
56–66	3	50	2	7	62	9,3
Total	**4**	**513**	**112**	**37**	**666**	**100,0**

Source: Questionnaires and HR data

Information in Table 7.4 shows no major relationship between the officers' level of education and age, although those with degrees and higher qualifications tend to be concentrated in the age bracket 36 to 45.

In Table 7.5 a profile of extension officers in terms of age and job (salary) levels is presented.

TABLE 7.5 Profile of extension officers by age and salary levels

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	2	21	4	1	27	4
36–45	15	320	3	2	354	53
46–55	2	6	4	4	223	33,4
56–65	1	51	7	2	62	9,3
Total	**20**	**603**	**33**	**10**	**666**	**100,0**

Source: Questionnaires and HR data

As the majority of officials fall between the ages of 36 to 55, it is therefore not surprising to note that the majority of employees in all salary levels fall within this bracket, i.e. 354 (53 %) out of 666.

A profile of extension officers in terms of job title and gender is presented in Table 7.6.

TABLE 7.6 Profile of extension officers by job titles and gender

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Technician	3	7	20	3
Senior Agricultural Technician	410	153	63	84,5
Agricultural Scientist	18	4	22	3,3
Senior Agricultural Scientist	16	3	19	2,8
Assistant Director	24	8	32	4,8
Deputy Director	6	4	10	1,5
Total	**487**	**179**	**666**	**100,0**

Source: Questionnaires and HR data

Table 7.6 indicates that the majority of officials occupy the rank of Senior Agricultural Technician. In terms of gender, the majority of those appointed at Assistant Director level and higher are male, with 30 (71,4 %) out of 42.

A general profile of extension officers based on salary level and gender is presented in Table 7.7.

TABLE 7.7 Profile of extension officers by salary level and gender

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	13	7	20	3,0
7–8	479	120	599	89,9
9–10	29	8	37	5,6
11–12	6	4	10	1,5
Total	527	139	666	100,0

Source: Questionnaires and HR data

There are no disparities between the officers' salary level and gender from levels 4–8. When it comes to levels 9–12, however, there are huge disparities. This has been shown in Table 7.6.

A profile of extension officers in terms of years of experience is presented in Table 7.8.

TABLE 7.8 Profile of extension officers by years of experience and gender

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	13	7	20	3
6–10	3	7	10	1,5
11–20	232	79	311	46,6
21–29	190	46	236	35
≤30	89	0	89	13
Total	**527**	**139**	**666**	**100,0**

Source: Questionnaires and HR data

Across the gender line, the majority of officers have many years of experience, ranging from 11 to 29 years.

8. Mpumalanga

8.1 Introduction

Mpumalanga Province, meaning “place of the rising sun,” lies in the north-eastern region of South Africa, with the capital, Nelspruit, situated approximately 450 km east of Johannesburg. The region is characterised by spectacular natural beauty, a wealth of natural resources and is one of the fastest-growing provinces in the country. The province occupies 6,5 % of the surface area of South Africa and has a population of approximately 3 million people. The population is largely Siswati and isiNdebele-speaking, although fairly large communities of Xitsonga, Sesotho, isiZulu, Afrikaans and English-speaking people reside in the province.

In terms of agricultural training, the province has only one academic institution, the Lowveld College of Agriculture. In terms of municipality demarcation, the province is divided into 3 districts, namely: Enhlanzeni, Gert Sibande and Nkangala district.

8.2 General profile of agriculture in Mpumalanga

Agriculture is one of the largest economic sectors in Mpumalanga, producing 10 % of total output in South Africa. The growing demand for agricultural products is an important factor in the agricultural sector. The province’s main products are sugar cane, sunflower seed, sorghum, potatoes, onions, cotton and maize.

Agricultural products range widely from summer cereals and legumes in the highveld region to subtropical and citrus fruit and sugar in the Lowveld. There are extensive irrigation activities in the area near Groblersdal and the Lowveld area. According to a census of commercial agriculture, in 2002 there were 5 104 farming units in the province.

8.3 Extension and advisory service

The Provincial Department of Agriculture, with its headquarters in Nelspruit, supports farmers and communities with extension and advisory service. There are about 183 extension officers employed by the Provincial Department of Agriculture. In terms of their support and function extension, they are expected to:

- Assist farmers to form commodity groups.
- Assist farmers to find buyers.
- Obtain and use market information.
- Assist farmers as to the quantities and time to sell.
- Advise farmers on production issues.
- Train farmers in groups.

Extension officers are also expected to assist in the implementation of government priority programmes. In the case of Mpumalanga their focal programmes are CASP, LRAD, LandCare programmes and food security (Masibuyele emasimini), including poverty alleviation programmes directed by the Department of Social Development.

8.4 Profile of extension officers

The profile of extension officers will be analysed in terms of age, gender, race, education and training, employment level, including job title and their years of experience in the field. The information will be presented in Tables 8.1 to 8.8.

TABLE 8.1 Profile of extension officers by age and gender, n = 183

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥35	15	16	31	16,9
36–45	55	44	99	54,1
46–55	32	10	42	22,9
56–65	9	2	11	6,8
Total	**111**	**72**	**183**	**100,0**

Source: Questionnaires and HR data

Table 8.1 depicts that the majority of extension officers, i.e. 99 (54,1 %) are between the ages of 36 to 45, followed by those in the 46 to 55 age bracket with 42 (22,9 %). In terms of gender, 111 (61 %) of the extension officers are male and 72 (39 %) are female. For the age category 45 years and below, there is a strong gender balance, reflecting that the province is adhering to the Employment Equity Act.

In Table 8.2 a race and gender profile of extension officers is presented.

TABLE 8.2 Race and gender profile of extension officers, n = 183

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	108	72	180	98,4
Whites	3	0	3	1,6
Total	**111**	**71**	**183**	**100,0**

Source: Questionnaires and HR data

Table 8.2 depicts that the majority of the extension officers are Africans constituting 180 (89 %), followed by Whites which constitute 3 (1,6 %). Owing to the skewed dominance of Africans as extension officers in the province, it is therefore not surprising to note that gender-wise African males and females are in the majority.

In Table 8.3 extension officers are analysed in terms of qualifications and gender.

TABLE 8.3 Profile of extension officers by qualification and gender, n = 183

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	3	2	5	2,7
Diploma	84	53	137	74,9
Degree	15	12	27	14,8
Postgraduate	9	5	14	7,7
Total	**111**	**72**	**183**	**100,0**

Source: Questionnaires and HR data

There are about 41 (22,4 %) out of 183 officials in possession of a degree or higher qualification. In terms of gender, there are 17 (23,6 %) out of 72 females in possession of a degree or higher qualification, as compared to 24 (21,6 %) out of 111 males.

In Table 8.4 a profile of extension officers is presented in terms of age and qualifications.

TABLE 8.4 Profile of extension officers by age and qualification, n = 183

Age	Qualification				Total	
	Matric (No.)	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	3	8	15	5	31	16,9
36–45	1	81	11	6	99	54,1
46–55	1	37	1	3	42	22,9
56–65	0	11	0	0	11	6,0
Total	**5**	**137**	**27**	**14**	**183**	**100,0**

Source: Questionnaires and HR data

Information in Table 8.4 indicates that all the officials with degrees or higher qualifications are under the age of 56. This also applies to those with diploma and lower qualifications.

In Table 8.5 a profile of extension officers in terms of age and job (salary) level is presented.

TABLE 8.5 Profile of extension officers by age and salary level, n = 183

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	7	17	4	2	30	16,4
36–45	10	81	6	2	99	54,1
46–55	6	32	4	0	42	22,9
56–65	2	10	0	0	12	6,6
Total	**25**	**140**	**14**	**4**	**183**	**100,0**

Source: Questionnaires and HR data

The majority of officials on salary levels 4–8 are between the ages of 36 to 45. At salary levels 9 and higher, officials are spread between the ages of 21 to 55.

A profile of extension officers in terms of job title and gender is presented in Table 8.6.

TABLE 8.6 Profile of extension officers by job title and gender, n = 183

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Technician	17	8	25	13,7
Senior Agricultural Technician	72	49	121	66,1
Agricultural Scientist	12	6	18	9,8
Senior Agricultural Scientist	1	1	2	1,1
Assistant Director	7	4	11	6,0
Deputy Director	2	4	6	3,3
Total	**111**	**72**	**183**	**100,0**

Source: Questionnaires and HR data

Table 8.6 depicts that the majority of extension officers occupy the rank of Senior Agricultural Technician constituting 121 (66,1 %), followed by Agricultural Technician constituting 25 (13,7 %). Out of 183, only 37 extension officers are sharing the following positions: Agricultural Scientist, Assistant Director, Deputy Director and Senior Agricultural Scientist. In terms of gender, males dominate in all job categories except in that of Senior Agricultural Scientist where male and female numbers are the same. From these findings, it can be deduced that extension as a function operates at a subdirectorate level, because there is no post for a Director of Extension Service.

A general profile of extension officers based on salary level and gender is presented in Table 8.7.

TABLE 8.7 Profile of extension officers by salary level and gender, n = 183

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	17	7	24	13,1
7–8	84	56	140	76,5
9–10	9	5	14	7,7
11–12	1	4	5	2,7
Total	**111**	**72**	**183**	**100,0**

Source: Questionnaires and HR data

Table 8.7 depicts that the majority of extension officers are between salary levels 7–8, constituting 140 (76,5 %) followed by those on salary levels 4–6. In terms of gender, males dominate in all salary levels, except levels 11–12 where females are in the majority.

A profile of extension officers in terms of years of experience is presented in Table 8.8.

TABLE 8.8 Profile of extension officers by years of experience, n = 183

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	9	9	18	12,3
6–10	5	1	6	4,1
11–20	45	43	88	60,3
21–29	21	8	29	19,9
≤30	5	0	5	3,4
Total	**85**	**61**	**146**	**100,0**

Source: Questionnaires and HR data

Table 8.8 depicts that the majority of extension officers, i.e. 88 (60,3 %) have between 11 to 20 years of experience, followed by those with 21 to 29 years of experience. In general, there is a strong balance in terms of officers' years of experience in the province.

9. Northern Cape

9.1 Introduction

The Northern Cape is South Africa's largest province. The province covers an area of 36,3 million km² and agriculture is the second most important economic activity in the province. Its population (± 1,1 million) translates to 2 persons per km², making it the most sparsely-populated province. The Orange River runs through the province, providing the basis for a healthy agricultural industry. The south and south-eastern parts of the province are high-lying (1 200–1 900 m) in the Roggeveld and Nuweveld districts. The landscape is characterised by vast, arid plains with outcrops of haphazard rock piles. The Atlantic Ocean forms the western boundary. The province is dominated by the Karoo Basin and consists mostly of sedimentary rocks and some dolerite intrusions. The main languages spoken are Afrikaans (70 %), Tswana (20 %) and isiXhosa (6,5 %).

The Northern Cape is rich in minerals, with the country's major diamond pipes found in the Kimberley district.

In terms of demarcation, the Northern Cape is divided into 5 district municipalities, namely: Namaqua, Pixley Kaseme, Siyanda, Frances Baard and Kgalagadi.

9.2 General profile of agriculture in Northern Cape Province

Freehold is the most frequent form of land tenure and this land is primarily used for extensive grazing. Of this land, less than 1 % is classified as arable land and a further 140 000 ha are for intensive crop production, horticulture and viticulture. Table grape industry is the fastest expanding industry in the Northern Cape Province. The estimated farm income over the past 3 years is as follows:

- ±37 % for animal products
- ±34 % for field crops and
- ±29 % for horticultural crops.

Nicknamed the sunniest province in the country, the Northern Cape has several distinctions to boast of:

- The coldest and the hottest districts in the country, Sutherland (winter) and Upington (summer), respectively.
- The most sparsely populated (2 people per km²).
- The largest province occupying about 30,5 % of RSA's surface area.
- The wonderful natural flower show of Namaqualand.
- A sizeable increase in the production of raisins, resulting in the South African Dried Fruit and Nut (SAFARI) paying a record R200 million to 200 producers in a single year. These are grown intensively in the Orange River Valley, especially at Upington, Kakamas and Keimoes.
- The first transfrontier park, The Kgalagadi Transfrontier Park, which is the largest remaining protected natural ecosystem in the world.

Wheat, fruit, groundnuts, maize and cotton are produced at the Vaalharts Irrigation Scheme near Warrenton. The Northern Cape is enjoying a tremendous growth in value-added activities, including game farming. Food production and processing for the local and export market is also growing significantly.

The economy of a large part of the Northern Cape, the interior Karoo, depends on sheep farming, while the karakul-pelt industry is one of the most important in the Gordonia district around Upington. There are approximately 6 114 commercial farmers in the Northern Cape (*Statistics South Africa*).

9.3 Extension and advisory service

The envisaged growth in food production as well as the export market has significant implications for the provincial extension and advisory service. The capacity and competence will have to match this effort. Currently,

the province faces a challenge of depending on expertise from outside the province for personnel and generally those recruited tend to live in the less rural provinces of the country.

The Northern Cape has an impressive number of programmes they wish to undertake, and they have gone to some lengths to align their strategic objectives with the provincial and sectoral targets. Extension and advisory service is expected to support a number of programmes and these include:

9.3.1 Land reform

A Land Reform Coordinating Committee (LRCC) has been established under the leadership of the MEC, to coordinate land reform activities and plan on the post-settlement support, in collaboration with various role players. The funds allocated under CASP will be used to support land reform beneficiaries. Institutions such as the Agricultural Research Council (ARC) and the Council for Scientific and Industrial Research (CSIR) will be co-opted to assist with land-use patterns, including suitability, index and planning.

9.3.2 Comprehensive Agricultural Support Programme

The province will receive an amount of R17,9 million to fund the comprehensive support programme to land reform beneficiaries. An extra amount of R4 million will be used for the civil society mobilisation exercise in order to make the beneficiaries and the public aware of CASP in the province's AgriBEE. The agricultural sector in the province has indicated its support towards an implementation of AgriBEE and we will work together, once the targets have been set, to develop implementation plans and monitoring tools in order to make AgriBEE a success.

9.3.3 Livestock Improvement Programme

The research stations in the province annually produce high-quality animal breeding material and these animals will be used to assist the land reform beneficiaries with good-quality breeding animals, in order to improve on their animal population. We have also already established a goat breeding farm to assist with the implementation of the commercialisation of the goats' project in the province.

9.3.4 Women in Agriculture Programme

The department will continue to encourage women to participate in the annual Female Farmer of the Year competition and we will ensure that all female farmers identified since the competition was started are supported fully through land reform programmes and CASP.

9.3.5 Training of small-scale/subsistence farmers

A number of our small-scale or subsistence farmers lack the skills such as production management, financial management, marketing skills, etc.

9.3.6 Orange River Subsistence Farmer Settlement Programme (ORSFSP)

This programme is aimed at broadening access to agriculture through the settlement and development of subsistence farmers along the Orange River. It entails the allocation of 4 000 ha of water rights that will be used for irrigation, of which 2 000 ha have been earmarked for the Karoo project worth R6 million, to improve global competitiveness and the profitability of the agricultural sector.

9.3.7 Research and development

The arid nature of the province makes farming in the Northern Cape very difficult, compared to other provinces in the RSA. We therefore require continuous innovative ideas through research, in order to maintain sustainable

agricultural activities and to compete in the global arena. The province will initially endeavour to pay particular attention to small stock research and research on alternative crop farming. This will require us to recruit scientists and to develop young scientists who originate from Northern Cape Province, in order to improve the quality of research in the province.

9.3.8 Agro-processing projects

Agro-processing has been identified as an activity that will add value to the products and ultimately lead to an increase in job creation and income generation in the province. We will, together with organised agriculture and the Department of Economic Services, identify and fund feasible and viable agro-processing projects that will ultimately become flagship projects for agriculture. We will establish an Advisory Centre and committee that will develop provincial plans on agro-processing (terms of reference and roles will be developed in consultation with the industry).

9.3.9 Implementation of customised commodity strategies

The agricultural sector represented by government and organised agriculture has initiated and agreed on the development of specific commodity sector strategies for achieving the vision of a prosperous agricultural sector in South Africa. We will, therefore, in the next 3 to 5 years initially champion the finalisation and implementation of the Livestock (especially small stock and in particular the commercialisation of the goats), Grain and Horticultural Strategies in the Northern Cape.

9.3.10 Facilitating export of agricultural products

There are a number of farms and establishments in the Northern Cape, which already meet the export requirements for continents such as Asia and Europe. This on its own is an achievement that the province is proud of. The department, in collaboration with the industry, SA Agri-academy and the Department of Economic Affairs, must use this competitive advantage to improve on the export procedures and systems in order to keep the export market open and to be ahead of the rest. We therefore commit ourselves to assist the exporters and to improve the conditions of the emerging sector in order for them to participate in the export market.

9.4 Profile of extension officers

The profile of extension officers will be analysed in terms of age, gender, race, education and training, employment level, including job title and their years of experience in the field. The information will be presented in Tables 9.1 to 9.8.

TABLE 9.1 Profile of extension officers by age and gender, n = 23

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥35	9	3	12	52,2
36–45	5	0	5	21,7
46–55	2	0	2	8,7
56–65	4	0	4	17,4
Total	**20**	**3**	**23**	**100,0**

Source: HR data

Information in Table 9.1 depicts that the majority of extension officers in the province are 35 years old and younger. Overall, about 17 (73,9 %) out of 23 are under the age of 46. This reflects a generally young cadre of extension personnel. In terms of gender, there is heavy male dominance: 20 (87 %) out of 23 officials.

A race and gender profile of extension officers is presented in Table 9.2.

TABLE 9.2 Race and gender profile of extension officers, n = 23

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	6	3	9	39,1
Coloureds	8	0	8	34,8
Whites	6	0	6	26,1
Total	**20**	**3**	**23**	**100,0**

Source: HR data

There is a general spread of extension officers across racial lines, but in terms of gender representations all females are Africans.

TABLE 9.3 Profile of extension officers by qualification and gender, n = 23

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Diploma	12	0	12	52,2
Degree	2	2	4	17,4
Postgraduate	6	1	7	30,4
Total	**20**	**3**	**23**	**100,0**

Source: HR data

Table 9.3 indicates that 52 % of officers have diplomas, in contrast to 17 % with degrees and 30,4 % with postgraduate qualifications. In terms of gender, 3 out of 3 females have degree qualifications or higher, compared to 8 (40 %) out of 20 males.

In Table 9.4 a profile of extension officers is presented in terms of age and qualification.

TABLE 9.4 Profile of extension officers by age and qualifications, n = 23

Age	Qualification						Total	
	Diploma		Degree		Postgraduate			
	Male (No.)	Female (No.)	Male (No.)	Female (No.)	Male (No.)	Female (No.)	No.	%
21–35	8	1	1	1	0	1	12	52,2
36–45	3	0	1	0	2	0	5	21,7
46–55	0	0	1	0	1	0	2	8,7
56–65	0	0	0	0	3	0	4	17,4
Total	**11**	**1**	**3**	**1**	**6**	**1**	**23**	**100,0**

Source: HR data

Table 9.4 depicts that the majority of officers with a diploma qualification are below the age of 35, while those with degrees and postgraduate qualifications range from age 36 to 56 and above.

In Table 9.5 a profile of extension officers in terms of age and job (salary) level is presented.

TABLE 9.5 Profile of extension officers by age and salary level, n = 23

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	8	1	2	1	12	52,2
36–45	0	2	2	1	5	21,7
46–55	0	0	1	1	2	8,6
56–65	0	0	4	0	4	17,4
Total	**8**	**3**	**9**	**3**	**23**	**100,0**

Source: HR data

Table 9.5 clearly shows that all the officers on salary levels 4–6 are under the age of 35, while those on salary levels 7–8 are under the age of 45. All those employed on salary levels 9–10 are spread throughout all age groups. Three officials on salary levels 11–13 are in the younger age brackets.

A profile of extension officers in terms of job title and gender is presented in Table 9.6.

TABLE 9.6 Profile of extension officers by job title and gender, n = 23

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Technician	7	3	11	47,8
Senior Agricultural Technician	4	0	4	17,4
Senior Agricultural Scientist	3	0	3	13
Assistant Director	3	0	3	13
Deputy Director	2	0	2	8,7
Director	1	0	1	4,3
Total	**20**	**3**	**23**	**100,0**

Source: HR data

Table 9.6 indicates that most officers occupy the rank of Agricultural Technicians, followed by those at Senior Agricultural Technicians' level. From the information presented, it is evident that extension in the province is coordinated at directorate level.

A general profile of extension officers based on salary level and gender is presented in Table 9.7.

TABLE 9.7 Profile of extension officers by salary level and gender, n = 23

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	6	2	8	34,8
7–8	3	0	3	13,4
9–10	9	0	9	39,1
11–13	3	0	3	13,0
Total	**20**	**3**	**23**	**100,0**

Source: HR data

In terms of salary and gender, all managerial positions are occupied by males and this reflects large gender disparities.

A profile of extension officers in terms of years of experience is presented in Table 9.8.

TABLE 9.8 Profile of extension officers by years of experience, n = 23

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	8	3	11	43,5
6–10	2	0	2	13,0
11–20	4	0	4	17,4
21–29	5	0	5	21,7
≤30	1	0	1	4,3
Total	**20**	**3**	**23**	**100,0**

Source: HR data

Table 9.8 depicts that the majority of extension officers have 5 or fewer years of experience. The latter correlates with the fact that the majority of officials in the province are fairly young.

10. North West

10.1 Introduction

North West province is slightly smaller than the US State of Pennsylvania. It is the country's fourth smallest province, taking up 8,7 % of South Africa's land area. The province is home to 3,6 million people, of whom 2,2 million live in functional urban areas. In terms of surface area it occupies 116 320 km^2. It is estimated that about 1,55 million people are economically active. Agriculture is of extreme importance to the North West, as it contributes about 6,2 % of the total GDP and 19 % of formal employment. The main languages spoken are Setswana (65,4 %), Afrikaans (7,5 %) and isiXhosa (5,8 %).

In terms of agricultural training, the province has 2 academic institutions, namely: University of the North West and Potchefstroom College of Agriculture.

In terms of municipality demarcation the province is divided into 4 districts, namely: Bophirima District Municipality, Bojanala Platinum District Municipality, Central District Municipality and Southern District Municipality.

10.2 General profile of agriculture in the province

North West is one of the important food baskets of South Africa. A third of South Africa's maize is produced here, as well as sunflower oil, groundnuts, fruit, tobacco, cotton and wheat. Some of the largest cattle herds are found near Rustenburg. The areas around Rustenburg and Brits are fertile mixed-crop farming land. Crops include tobacco, paprika, wheat, peppers, cotton and sunflowers. Agriculture in the eastern, wetter parts of the province largely comprises livestock and crop farming, while the semi-arid central and western parts of the province have livestock and wildlife farming. There are approximately 7 600 commercial farms (*North West Province state of the environment report*, 2002). Farmers are joined mainly in terms of commodity groups and associations. Three major irrigation schemes are located on the Crocodile, Vaal and Harts Rivers. The Vaalharts irrigation scheme covers a total area of about 43 700 km^2 of wheat, maize and groundnuts, taking up 36 %, 23 % and 22 % respectively of the total irrigated fields.

10.3 Extension and advisory service

The Provincial Department of Agriculture, with its headquarters in Mafikeng, supports farmers with extension and advisory service. There are about 137 extension officers in the employment of the Provincial Department of Agriculture.

These extension officers mainly assist farmers to form commodity groups, to identify local buyers, and to organise study groups and field days, etc.

Most of the extension officers are responsible for supporting some of the agricultural sector priority programmes, namely CASP, LandCare, Land Redistribution for Agricultural Development (LRAD), the Dipodi Programme and Beef Improvement Programme.

10.4 Profile of extension officers

The extension officers' profile will be analysed under the following variables: age, race, education and training, employment levels including job title and their experience in the field. The above variables will be presented by means of tables ranging from Tables 10.1 to 10.8

TABLE 10.1 Profile of extension officers by age and gender, n = 137

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥35	11	8	19	14
36–45	59	7	66	48
46–55	31	0	31	23
56–65	21	0	21	15
Total	**122**	**15**	**137**	**100**

Sources: Questionnaires

The majority of extension officers are between the ages of 35 to 45 constituting 66 (48 %), followed by the ages of 46 to 55 constituting 31 (23 %) and those aged between 36 to 45 and 46 to 55 are in the middle section. Other extension officers fall in the age group of 56 to 66 constituting 21 (15 %) and, lastly, there are a few extension officers in the age group of 35 and below, constituting 19 (14 %).

In terms of gender, males dominate all age categories and constitute 122 (89,1 %). The latter reflects a skewed gender representation.

A race and gender profile of extension officers is presented in Table 10.2.

TABLE 10.2 Race and gender profile of extension officers, n = 137

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	116	15	131	95,6
Whites	6	0	6	4,4
Total	**122**	**15**	**137**	**100,0**

Sources: Questionnaires

Table 10.2 depicts that the majority of the extension officers are Africans with 131 (95,6 %), followed by Whites constituting 6 (4 %). In terms of gender, both African males and females are in the majority.

In Table 10.3 a profile of extension officers in terms of qualifications and gender is presented.

TABLE 10.3 Profile of extension officers by qualifications and gender, n = 137

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Diploma	75	5	80	58
Degree	32	4	36	26
Postgraduate	15	6	21	16
Total	**122**	**15**	**137**	**100**

Sources: Questionnaires

In terms of information in Table 10.3, the majority of the officials, i.e. 80 (58 %) out of 137, have a diploma qualification. Those with a degree or higher qualification make up the other 42 %. In terms of gender, 10 (66,7 %) out of 15 females possess a degree or higher qualification, compared to 47 (41,9 %) out of 112 males with a degree or higher qualification.

In Table 10.4 a profile of extension officers is presented in terms of age and qualifications.

TABLE 10.4 Profile of extension officers by age and qualifications, n =137

Age	Qualification			Total	
	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	5	9	5	19	14,0
36–45	33	23	11	67	49,0
46–55	23	3	5	31	23,0
56–65	18	1	1	20	14,5
Total	**79**	**36**	**22**	**137**	**100,0**

Sources: Questionnaires

Table 10.4 depicts that the majority of extension officers with a diploma qualification are between ages 36 to 45. The majority of extension officers with degrees are between 36 to 45, while out of those with postgraduate qualifications the majority are between the ages 36 to 45. This table shows a general spread of officers in terms of qualifications across age categories.

In Table 10.5 a profile of extension officers in terms of age and job (salary) level is presented.

TABLE 10.5 Profile of extension officers by age and salary levels

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	1	18	0	0	19	14
36–45	5	54	6	1	66	48
46–55	5	24	2	0	31	23
56–65	3	17	1	0	21	15
Total	**14**	**113**	**9**	**1**	**137**	**100**

Sources: Questionnaires

Information in Table 10.5 clearly indicates a general spread of officers on salary levels 7–8 across the different age categories. Those on salary levels 9–12 are concentrated in the age bracket 36 to 45.

A profile of extension officers in terms of job title and gender is presented in Table 10.6.

TABLE 10.6 Profile of extension officers by job title and gender, n = 137

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Technician	17	5	22	16,1
Senior Agricultural Technician	91	8	99	72,3
Agricultural Scientist	2	1	3	2,1
Senior Agricultural Scientist	8	1	9	6,5
Assistant Director	2	0	2	1,4
Deputy Director	2	0	2	1,4
Total	**122**	**15**	**137**	**100,0**

Sources: Questionnaires

Table 10.6 depicts that the majority of extension officers occupy the rank of Senior Agricultural Technician with 99 (72,3 %) of the officers. When it comes to gender, males clearly dominate all management-related posts. None of the management positions is occupied by females.

A general profile of extension officers based on salary level and gender is presented in Table 10.7.

TABLE 10.7 Profile of extension officers by salary level and gender, n = 137

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	14	1	15	10,9
7–8	100	13	113	82,5
9–10	7	1	8	5,8
11–12	1	0	1	0,7
Total	**122**	**15**	**137**	**100,0**

Sources: Questionnaires

The majority of extension officers are on salary levels 7–8, i.e. 113 (82,5 %) out of 137. There is only 1 female on salary levels 9–10, mainly as a Senior Agricultural Scientist, as reflected in Table 10.6

A profile of extension officers in terms of years of experience is presented in Table 10.8

TABLE 10.8 Profile of extension officers by years of experience and gender, n = 137

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	5	4	19	14
6–10	89	11	100	73
11–20	11	0	11	8
21–29	10	0	10	7
≤30	7	0	7	5
Total	**122**	**15**	**137**	**100**

Sources: Questionnaires

Table 10.8 depicts that the majority of extension officers, i.e. 100 out of 137 have 6 to 10 years' work experience. In terms of gender, only males have work experience of more than 10 years. The latter may explain the lack of female officers in management-related positions, although there are 11 out of 15 females with work experience of between 6 to 10 years.

11. Western Cape

11.1 Introduction

The Western Cape is situated on the southernmost tip of the African continent. It is a region of majestic mountains, beautiful valleys, sandy beaches and breathtaking scenery, which makes it one of South Africa's prime tourist destinations. The cold Atlantic Ocean along the west coast is a rich fishing area, while the warmer Indian Ocean skirts the province's southern beaches.

More than 4,6 million people live in the Western Cape on 129 370 km^2 of land (*Mid-year estimates*, 2005). Afrikaans is spoken by the majority, with isiXhosa and English being the other main languages. The Western Cape has the highest number of educated adults in the country, with only 5,7 % of people aged 20 years or older having no schooling (*Census 2001*). The province has a strong network of Higher Education (HE) institutions, including the University of Cape Town, Stellenbosch University, the University of the Western Cape, the Cape Peninsula University of Technology and Elsenburg College.

Primary industries include agriculture, forestry, fishing, mining and quarrying, with tourism showing continuous growth.

The sheltered valleys between the mountains provide ideal conditions for the cultivation of top-grade fruit, such as apples, table grapes, olives, peaches and oranges. In the eastern part of the Western Cape, a great variety of vegetables is cultivated.

According to the results of the census, there were 45 818 active commercial farming units in South Africa in 2002, of which 7 185 farming units were in the Western Cape.

The province is divided into 5 agricultural regions, namely:

- Boland
- Little Karoo
- North West Region
- South Coast
- Swartland

11.2 General profile of agriculture in the province

The province can be divided into 3 climatic regions. The area around the Cape Peninsula and the Boland further inland is a winter rainfall region with sunny, dry summers.

Towards George, along the south coast, the climate gradually changes to year-round rainfall, while inland, towards the more arid Great Karoo, the climate changes to summer rainfall.

The Western Cape is known as one of the world's finest grape-growing regions. Many of its wines have received the highest accolades at international shows. The wheat-growing Swartland district around Malmesbury and the Overberg around Caledon form the bread basket of the country.

The inland Karoo region (around Beaufort West) and the Overberg district (around Bredasdorp) produce wool and mutton, as well as pedigree Merino breeding stock.

Other animal products include broiler chickens, eggs, dairy products, beef and pork. The Western Cape is the only province with an outlet for the export of horses. This earns the country millions of rand in foreign revenue.

The province has also established itself as the leading facilitator in the export of ostrich meat to Europe. It boasts the highest number of export abattoirs in the country, from which products to the value of about R1 billion are exported per year. In addition to meat, fine leatherwear and ostrich feathers are also exported to worldwide destinations.

More than 70 % of registered export farms are situated in the Western Cape, centred mainly in the Little Karoo region around Oudtshoorn. The industry is not only an important contributor to the provincial economy, but the

ostrich has also become a significant part of Western Cape culture, branding and identity. The number of ostriches slaughtered in South Africa increased from 152 000 in 1993 to 340 000 in 2004 at a value of more than R560 million, creating about 20 000 jobs nationwide.

The Provincial Department of Agriculture's ostrich-breeding herd at Oudtshoorn is the only one in the world for which production data for several generations of ostriches can be connected to their pedigrees.

The plankton-rich cold Benguela current flows along the west coast of the province and is considered to be one of the world's richest fishing grounds. This resource is protected from overfishing by foreign vessels by means of a 200 km commercial fishing zone and a strict quota system.

Snoek, Cape lobster, abalone, calamari, octopus, oysters and mussels are among the most sought-after piscatorial delights.

11.3 Extension and advisory service

The extension and advisory service in the Western Cape is expected to support the provincial growth and development strategy, Ikapa Elihlumayo, and has the challenge of deracialising agriculture in the province. The province is expected to provide support to the beneficiaries of land reform, particularly farmworkers, as well as changing the image of agriculture among the urban and rural communities of the Western Cape. Other expectations are to provide support to the subsistence farmers who have moved to places such as Khayelitsha from the Eastern Cape Province.

11.4 Profile of extension officers

The profile of the extension officers will be analysed in terms of age, race, education and training, employment levels including job titles and their experience in the field. The information will be presented by means of tables ranging from Tables 11.1 to 11.8.

TABLE 11.1 Profile of extension officers by age and gender, n = 119

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
21–35	29	9	38	31,9
36–45	40	10	50	42,0
46–55	19	5	24	20,2
56–65	6	1	7	5,9
Total	**94**	**25**	**119**	**100,0**

Source: HR data

In terms of information in Table 11.1, there is a general spread of officers across the age categories with heavy concentration in the middle group of 36 to 55. There is a fair representation of young extension officers. In terms of gender, 94 (79 %) out of 109 officials are male.

A race and gender profile of extension officers is presented in Table 11.2.

TABLE 11.2 Race and gender profile of extension officers, n = 119

Race	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Africans	10	9	19	16,0
Coloureds	29	3	32	26,9
Whites	55	13	68	57,1
Total	**94**	**25**	**119**	**100,0**

Source: HR data

Table 11.2 depicts that the majority of extension officers are Whites with 68 (57 %) officers, followed by Coloureds with 32 (26 %), followed by Africans with 19 (15 %). In terms of gender, there are 94 (78,9 %) males,

which comprise 10 (8,4 %) African males, 55 (46,2 %) White males and 29 (24,4 %) Coloured males. There are 25 (21 %) females comprising 13 (10,9 %) White females, 9 (7,6 %) African females and 3 (2,5 %) Coloured females.

In Table 11.3 a profile of extension officers in terms of qualifications and gender is presented.

TABLE 11.3 Profiles of extension officers by qualifications and gender

Qualification	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Matric	25	5	30	25,3
Diploma	47	15	62	52,1
Degree	17	4	21	17,6
Postgraduate	5	1	6	5,0
Total	**94**	**25**	**119**	**100,0**

Source: HR data

Table 11.3 depicts that the majority of extension officers having a diploma are 62 (52,1 %), followed by those with Matric 30 (25,3 %), followed by those having degrees and postgraduate qualifications 22 (27 %) In terms of gender, 5 (20 %) out of 25 females have degrees or higher qualifications, compared to 22 (23 %) out of 94 males.

In Table 11.4 a profile of extension officers is presented in terms of age and qualifications.

TABLE 11.4 Profile of extension officers by age and qualifications, n = 119

Age	Qualification				Total	
	Matric (No.)	Diploma (No.)	Degree (No.)	Postgraduate (No.)	No.	%
21–35	6	22	9	1	38	31,9
36–45	16	26	7	1	50	42,0
46–55	6	11	4	3	24	20,2
56–65	2	3	1	1	7	5,9
Total	**30**	**62**	**21**	**6**	**119**	**100,0**

Source: HR data

Information in Table 11.4 demonstrates that the majority of officials with a diploma and degree qualifications are 45 years old and under. In terms of those with postgraduate qualifications, 4 out of 6 are older than 45.

In Table 11.5 a profile of extension officers in terms of age and job (salary) level is presented.

TABLE 11.5 Profile of extension officers by age and salary levels

Age	Salary level				Total	
	4–6 (No.)	7–8 (No.)	9–10 (No.)	11–13 (No.)	No.	%
21–35	9	13	16	0	38	32,0
36–45	11	14	25	0	50	42,0
46–55	6	6	11	1	24	20,2
56–65	1	2	4	0	7	5,9
Total	**27**	**35**	**56**	**1**	**119**	**100,0**

Source: HR data

By comparison there is no correlation between officers' salary level and age category. Officials from salary levels 4–10 are spread across the various age brackets. Nothing can be read in terms of this pattern, with respect to human resource policy strategies of the province.

A profile of extension officers in terms of job title and gender is presented in Table 11.6.

TABLE 11.6 Profile of extension officers by job title and gender

Job title	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Agricultural Officers	26	7	33	27,7
Agricultural Technicians	5	1	6	5,0
Senior Agricultural Technicians	39	17	56	47,1
Senior Agricultural Scientists	19	0	19	15,9
Assistant Director	4	0	4	3,4
Deputy Director	1	0	1	0,8
Total	**94**	**25**	**119**	**100,0**

Source: HR data

Table 11.6 depicts that the majority of extension officers occupy the rank of Senior Agricultural Technician with 56 (47 %) officers, followed by Agricultural Officer with 33 (27,7 %) officers, followed by Senior Agricultural Scientist with 19 (15,95 %) officers. Eleven officers are sharing the following positions: Agricultural Technician, Assistant Director and Deputy Director. In terms of gender, males dominate in all positions.

A general profile of extension officers based on salary level and gender is presented in Table 11.7.

TABLE 11.7 Profile of extension officers by salary level and gender

Salary level	Gender		Total	
	Male (No.)	Female (No.)	No.	%
4–6	21	6	27	22,7
7–8	20	15	35	29,4
9–10	52	4	56	47,1
11–12	1	0	1	0,8
Total	**94**	**25**	**119**	**100,0**

Source: HR data

Table 11.7 depicts that the majority of extension officers employed are between salary levels 9–10 with 52 (43 %) males and 4 (3 %) females, followed by salary levels 7–8 with 20 (16,8 %) males and 15 (12 %) females. Salary levels 4–6 follows with 21 (17 %) males and 6 (5 %) females. There are no females in management positions and only one male on salary levels 11–12. The absence of salary level 13 implies that extension in the province is managed at subdirectorate level. In general, the province has the highest percentage of officers on salary levels 9–10 than any other province.

A profile of extension officers in terms of years of experience is presented in Table 11.8.

TABLE 11.8 Profile of extension officers by years of experience and gender

Years of experience	Gender		Total	
	Male (No.)	Female (No.)	No.	%
≥ 5	38	17	55	46,2
6–10	14	6	20	16,8
11–20	29	0	29	24,4
21–29	4	1	5	4,2
≤30	9	1	10	8,4
Total	**94**	**25**	**119**	**100,0**

Source: HR data

Table 11.8 depicts that the majority of extension officers have 5 or fewer years of work experience with 55 (46,2 %), followed by those between 11–20 years, 29 (24,4 %). Only 10 (8,4 %) extension officers have more than 30 years of work experience.

12. Extension:Farmer ratios

12.1 Introduction

The challenge facing the delivery of a credible extension and advisory service to the farmers comes from a number of areas, as the approved norms and standards have identified. Apart from resources and expertise, actual visibility is generally acknowledged as the most telling efficiency. At forum after forum where beneficiaries of government interventions are invited to reflect on the interventions, their major concern is the invisibility of extension officers.

The demand for advisory and/or extension service varies according to the nature of the farming practices—that is, crop farming, livestock farming or mixed farming systems involving both crop and livestock and farm size. The extension:farmer ratios often depend on the specifics of an operation and its state of advancement and the intensity of support programmes.

According to the approved norms and standards for extension and advisory service in agriculture, the following figures are a rough indication and estimates of what the extension:farmer ratios should be.

TABLE 12.1 Proposed agricultural extension officer:farmer ratios

Scale of operation	Nature of operation		
	Crops	Livestock	Mixed
Subsistence and household	1:400	1:500	1:500
Semicommercial	1:250	1:250	1:300
Market-orientated and large-scale commercial	1:500	1:500	1:500

The norms and standards, however, indicate that local conditions, circumstances and realities must dictate the application of ratios. Furthermore, each province must decide on the relevant ratios according to CASP clientele categorisation, taking into account local conditions, circumstances and variations.

The study on profiling of extension officers specifically sought to establish the distribution of the officers in the field, as well as to establish the type of clientele they were dealing with. However, the study did not yield sufficient data to differentiate between different categories of farmers with regard to the types of commodities or types of farming (crops *versus* livestock). Additionally, because of incompleteness of the forms with respect to this question, only those forms which had answers to the questions were processed. The completed forms represented a viable sample of the total population of officers in the various provinces. To this extent, this report deals with ratios purely on the basis of numbers and the results will be extrapolated to apply to the entire population. This information will be compared to the recommendations in the norms and standards, from which recommendations will be made to remedy the situation where regarded as necessary. In all the provinces, the ratio of 1:3 000+ was interpreted to reflect the managers of extension service who counted farmers who are served by their subordinates as their responsibility as well. Consequently, the column indicating 3 000+ does not count in the deliberations towards finding recommendations.

12.2 The officer:farmer ratios by provinces

A composite distribution of extension officer:farmer ratios by provinces—based on the responding samples is presented in Table 12.2.

TABLE 12.2 A composite distribution of extension officer:farmer ratios by provinces—based on the responding samples

Number of farmers	Provinces							
	EC	FS	GP	KZN	LIM	MP	NW	WC
1–200	4,7	44,0	55,6	18,8	23,4	23,3	32,6	31,4
201–400	11,6	27,9	11,1	21,7	16,7	18,9	17,4	7,8
401–600	11,3	7,9	3,7	13,8	10,3	4,4	18,9	9,8
601–800	9,1	7,0	3,7	8,2	5,0	10,0	9,1	5,9
801–1 000	7,3	4,7	4,7	7,6	4,6	2,2	7,6	2,0
1 001–1 200	2,6	0	0	2,1	2,5	1,1	2,3	2,0
1 201–1 400	2,2	0	0	2,2	2,1	2,2	0,8	0
1 401–1 600	5,5	0	7,4	4,1	2,8	3,3	1,5	0
1 601–1 800	2,9	0	0	2,6	2,5	1,1	0	0
1 801–2 000	8,7	0	0	3,8	2,8	4,4	0,8	0
2 001–2 200	0,7	0	0	0,7	1,1	1,1	0	0
2 201–2 400	0,4	0	0	0	0,4	0	0,8	0
2 401–2 600	2,9	2,3	2,7	1,2	3,2	3,3	0,6	1,9
2 601–2 800	0,4	0	0	0,3	0	1,1	0	0
2 801–3 000	2,9	0	0	1,9	0,7	1,1	0	0
3 000+	26,8	6,2	11,1	11,0	19,9	22,5	7,6	39,2

12.2.1 Eastern Cape

This information is furnished by 275 respondents. The results given in Table 12.1 show that the Eastern Cape had more than a quarter of their officers servicing about 600 farmers or fewer, and 4 in 10 responsible for 1 000 or fewer. With the exception of managers whose overall responsibility, encompassing many subordinates, claims 27 %, the other 20 % is spread fairly evenly over a range of 1 001 to 3 000 farmers each.

Assuming a general ratio of 1:500 in the norms and standards, the results for this province indicate that approximately 28 % of the officers fall within the recommended ratio of 1:500.

12.2.2 Free State

Table 12.1 shows the results of officer:farmer ratio in the Free State, according to which 71 % of officers service 400 and fewer farmers. Considering another 7 % who have between 401 and 600, 14 % are responsible for a larger number of farmers.

12.2.3 Gauteng

In terms of Table 12.1 the officer:farmer ratios of 66,7 % of officers in Gauteng meet the requirements set in the norms and standards. Altogether 12,1 % assist between 401 and 1 000 farmers each. Where there are more than 1 000 farmers per officer, there are 2 other segments which show figures; that is 7,4 % and 2,7 % officers responsible for between 1 401 and 1 600, as well as 2 401 and 2 600, respectively. A third of the officers' assignments in this province do not meet the recommendations in the norms and standards. However, one mitigating aspect is the fact that, because Gauteng's Department of Agriculture does not render an extension service to farmers directly, the role of extension officers is facilitative in nature. Consequently, the officer:farmer ratio has relatively less impact.

12.2.4 KwaZulu-Natal

According to Table 12.2, 40% of extension officers in this province have 400 or fewer farmers, with a further 14 % serving between 401 and 600. An equal proportion of around 8 % of officers service between 601–800 and 801–1 000 farmers. The rest of the officers service huge numbers of up to 3 000 per officer.

12.2.5 Limpopo

In terms of Table 12.1, half of the extension officers have a farmer load of 600 or fewer. A further 9,6 % are responsible for between 601–1 000 each. The remaining 18,1 % have varying loads of up to 3 000 farmers per officer. In short, therefore, 49,6 % of officers in Limpopo have officer:farmer ratios much higher than those given as guidelines in the norms and standards – that is, about 330 officers have heavier loads than is recommended.

12.2.6 Mpumalanga

It can be seen from Table 12.1 that 47 % of the officers in Mpumalanga have 600 or fewer clients, with a further 10 % responsible for between 601–800 farmers. The results also show that 43 % of officers serve in excess of 800 farmers each.

12.2.7 Northern Cape

The Northern Cape has no column in Table 12.1 because there were no responses to this question from the province. However, the information on this province was obtained from direct interaction with the representatives during the validation workshop on 28 February 2007. Accordingly, there are 6 114 commercial farmers in the province, and between 5 000 and 7 000 subsistence farmers.

Considering the 23 extension officers currently in the employment of the province, the extension officer:commercial farmer ratio stands at 1:266. However, once you consider the emerging farmer segment, the ratio changes to between 1:483 and 1:570.

12.2.8 North West

According to Table 12.1, the results for North West indicate that 68,9 % of officers have a farmer load of 600 or fewer, with a further 17 % servicing between 600 and 1 000 clients. The number of officers with heavier loads than 1 000 farmers is 14 %, of which 7,6 % is attributed to management.

12.2.9 Western Cape

The Western Cape has 31,4 % of officers assisting 200 or fewer farmers. A further 18 % assist between 400 and 600 farmers. Other than 6 % of officers who assist between 600 and 800 farmers, there is a mere 6 % that shoulder a load heavier than 800 farmers each.

12.3 Discussion

Although the data collected would not allow a detailed differentiation between the types of farmers served by officers, the picture coming out is very useful as a pointer to the corrective measures necessary before all provinces fall within the prescripts of the norms and standards. Table 12.1 shows that, on average, approximately 55 % of extension officers serve 600 or fewer farmers each. Three provinces recorded results lower than 50 % for this aspect, notably the Eastern Cape (27,6 %), Mpumalanga (47 %), and Western Cape (49 %). The Western Cape, on the other hand, would seem to be within the norms and standards, given the preponderance of commercial farmers in the province.

As far as other provinces are concerned, it is encouraging to observe that there are fewer officers responsible for large numbers of clientele above the 1 200 farmers per officer.

The results of this study will be useful to extrapolate to various scenarios as a planning tool. The first step in that direction is to gain a sense of how many farmers there are in the country. Using the numbers given by the sample and extrapolated to the total number of officers, Table 12.2 gives an estimate of the farmer populations.

TABLE 12.3 The estimated number of farmers based on extrapolations

Province	Populations			
	Employed officers	Responding sample	No. of indicated farmers	Extrapolated population
Eastern Cape	623	275	296 614	671 965
Free State	70	43	15 715	25 583
Gauteng	29	25	8 191	9 502
KwaZulu-Natal	360	327	322 255	354 776
Limpopo	666	280	248 157	590 259
Mpumalanga	189	100	89 268	168 717
Northern Cape	23	–	13 114	13 114
North West	137	132	61 891	64 235
Western Cape	119	51	13 144	30 669
Total	**2 210**	**1 233**	**1 055 235**	**1 928 820**

Applying the law of averages, it could be extrapolated that there are 1 928 820 farmers in this country. The number of extension officers, assuming a straightforward ratio of 1:500 and 1:250 (excluding all the attendant factors to that calculation), that South Africa ought to have is a total of between 3 858 and 7 715 extension officers. The exact number would be influenced by circumstances in the various provinces, according to the nature of the farming activities and various unique challenges.

The upper figure of 7 715 compares less favourably with Kenya which has 7 000 officers in their establishment for a human population of 30 million, as opposed to South Africa with 2 210 for a population of 46 million. If Kenya's situation was a norm, this country should have 10 732 extension officers. However, different circumstances militate against using Kenya as a norm. Nevertheless, there is an argument out of this study to revise our extension figures upwards. If that approach were taken, a corrective measure would be guided, as illustrated in Table 12.3.

TABLE 12.4 The projected number of officers per province based on the extrapolated farmer population

Province	Number of farmers	Current number of extension officers	Suggested number by different ratios	
			1:500	1:250
Eastern Cape	671 965	623	1 344	2 688
Free State	25 683	70	52	103
Gauteng	9 502	29	19	38
KwaZulu-Natal	354 776	360	710	1 419
Limpopo	590 259	666	1 181	2 361
Mpumalanga	168 717	189	337	675
Northern Cape	13 114	23	26	52
North West	64 235	137	129	257
Western Cape	30 669	119	61	123
Total			**3 559**	**7 706**

Even if the extrapolated farmer population figures were correct, Free State, Gauteng, Northern Cape, North West and Western Cape already fall within the recommended range. Eastern Cape, KwaZulu-Natal, Limpopo, and Mpumalanga fall entirely outside the norms and standards' recommendations. A further focused study is warranted, targeting the latter provinces in order to determine the most appropriate extension:farmer ratios. The terms of reference would have to include a thorough census of farmers by their scale of operation, the nature of operation and specific challenges that would have an impact on the setting of ratios. Given the rural conditions of these provinces, the number of subsistence farmers residing in them, their relative poverty rating, and the level of expectation of government intervention therein, the results would inform government on the following aspects:

- The number of farmers per province.
- The number of extension officers required by category (i.e. Agricultural Community Workers, Agricultural Development Workers, Agricultural Advisers, Subject Matter Specialists, and Extension Coordinators).

The data collected would guide the government planning in a number of areas, including:

- The study options to prioritise in its bursary scheme.
- Restructuring of provincial organisational structures.
- Recruitment drives.
- The national department when presenting programmes such as CASP, in future.

13. Comparative analysis of extension personnel profile against the set norms and standards

13.1 Introduction

The document on the norms and standards for extension and advisory service prescribes some standards when it comes to the level of education and training of extension officers. A number of extension official:farmer ratios are dependent on the nature of dominating commodity (enterprise) within a specific area. However, in terms of this study, it has been difficult to make the comparison, given that extension officers themselves have no records of their clients. While the norms prescribe some standards when it comes to the profile of the extension officers, they also set standards for the employers when it comes to the nature and type of support that must be provided to the officers.

Where adequate data were supplied to conduct a comparative analysis, information will be presented in the form of tables and figures below, based on the profile of extension personnel in all 9 provinces. The latter will be compared to the norms and standards and compliance to the Employment Equity Act.

13.2 Number of employed extension and advisory service personnel

Table 13.1 presents the total number of extension officers as received and collated from each province.

TABLE 13.1 Number of employed extension officers nationally

Province	Total	
	No.	%
Eastern Cape	623	28
Free State	70	3
Gauteng	29	1
KwaZulu-Natal	360	16
Limpopo	666	30

Province	Total	
	No.	%
Mpumalanga	189	9
Northern Cape	23	1
North West	137	6
Western Cape	119	5
Total	**2210**	**100**

According to the information supplied, there are about 2 210 employed extension and advisory service officials. The largest numbers of extension officers are in Limpopo Province, constituting 30 % of the total; followed by Eastern Cape Province at 28 % and KwaZulu-Natal at 16 %. Gauteng Province and Northern Cape Province have the smallest number of appointed extension personnel, currently standing at 1 % of the overall population.

13.3 A comparison of extension personnel academic qualifications

In terms of the norms and standards document, the minimum academic qualification for an Agricultural Advisor is a Bachelor's degree in Agriculture. Any person with lower qualifications can only function as an Agricultural Development Officer. An analysis of the qualifications of extension officers against the set norms and standards is presented in Tables 13.2, 13.3 and Fig. 13.1.

TABLE 13.2 A comparison of academic qualifications of extension personnel against the set norms

Level of qualifications	Gender				Total	
	Male		Female			
	No.	%	No.	%	No.	%
Less than degree qualification	1305	59	467	21	1772	80,2
Degree or higher qualification	303	14	135	6	438	19,8
TOTAL	**1608**	**73**	**602**	**27**	**2210**	**100,0**

In terms of the findings from Table 13.2, it is evident that about 1 772 out of 2 210 (80,2 %) of the extension personnel have a diploma qualification. Only 438 (19,8 %) have a degree or higher qualification. Therefore, 8 out of 10 are less academically qualified to operate as agricultural advisors.

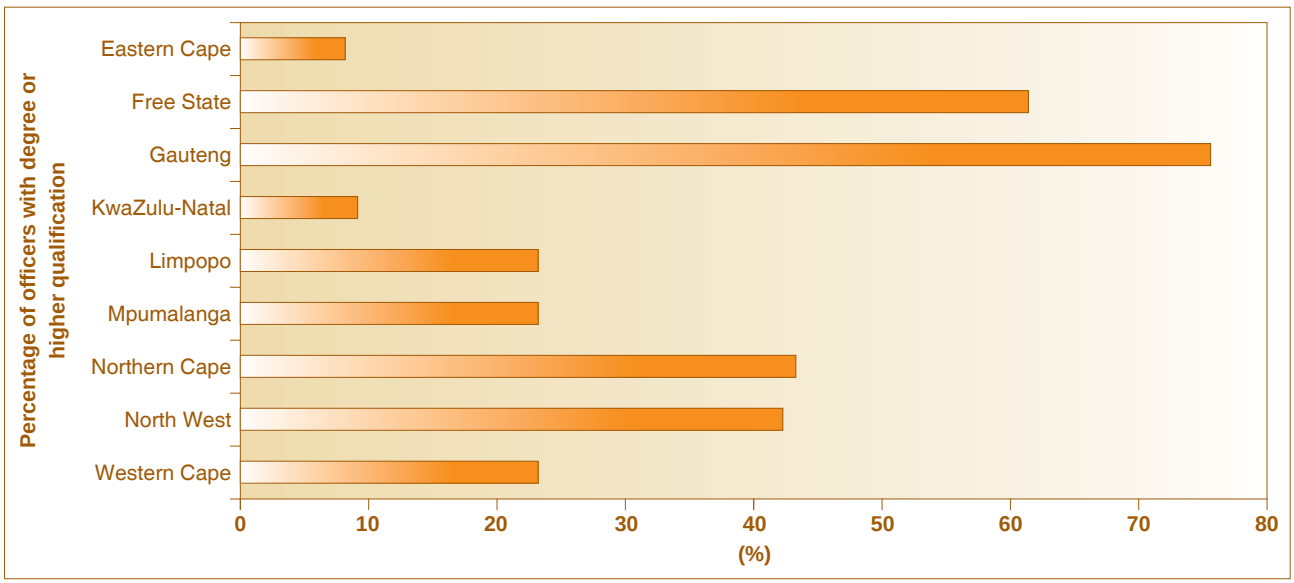

FIG. 13.1 A comparison of academic qualifications of extension personnel against set norms

In terms of the information from Fig. 13.1, only the Gauteng and Free State provinces have a good percentage of officers with degree qualifications or higher. Eastern Cape and KwaZulu-Natal have the lowest percentage of extension officers with degree qualifications or higher.

In Table 13.3 a gender comparison of officers with degree qualifications was undertaken. The purpose was to establish whether there was any variation between males and females when it came to levels of education.

TABLE 13.3 Gender comparison of officials with degree or higher qualification per province

Province	Males (%)	Females (%)
Eastern Cape	6,7	16,7
Free State	44,7	17,1
Gauteng	83,3	70,6
KwaZulu-Natal	9,4	10,0
Limpopo	20,7	28,8
Mpumalanga	21,6	23,6
Northern Cape	40,0	100,0
North West	42,0	67,0
Western Cape	23,0	20,0

Table 13.3 shows that in 7 out of 9 provinces, female extension officers have higher educational qualifications than their male counterparts. It is only in Gauteng and Free State where male officers are more educated than their female counterparts.

13.4 Skills required from extension and advisory officers

The norms and standards advocate that the extension personnel should be competent in the following areas, namely: client orientation and customer focus, communication, project management, knowledge management, service delivery orientation, problem-solving analysis, people management and empowerment. In an attempt to compare the level of competency of extension personnel, an analysis was undertaken into the nature of post-school training that they had completed. The findings are presented in Fig. 13.2.

The information in Fig. 13.2 clearly outlines the fact that very few extension officers have been formally exposed to skills programmes that are crucial in the delivery of products and services to farmers. Only 204 out of 2 210 officers had completed training in communication, 238 out of 2 210 had completed project management, 140 out of 2 210 had completed computer training which is the basis for knowledge management and 143 out of 2 210 had completed training related to people management and empowerment.

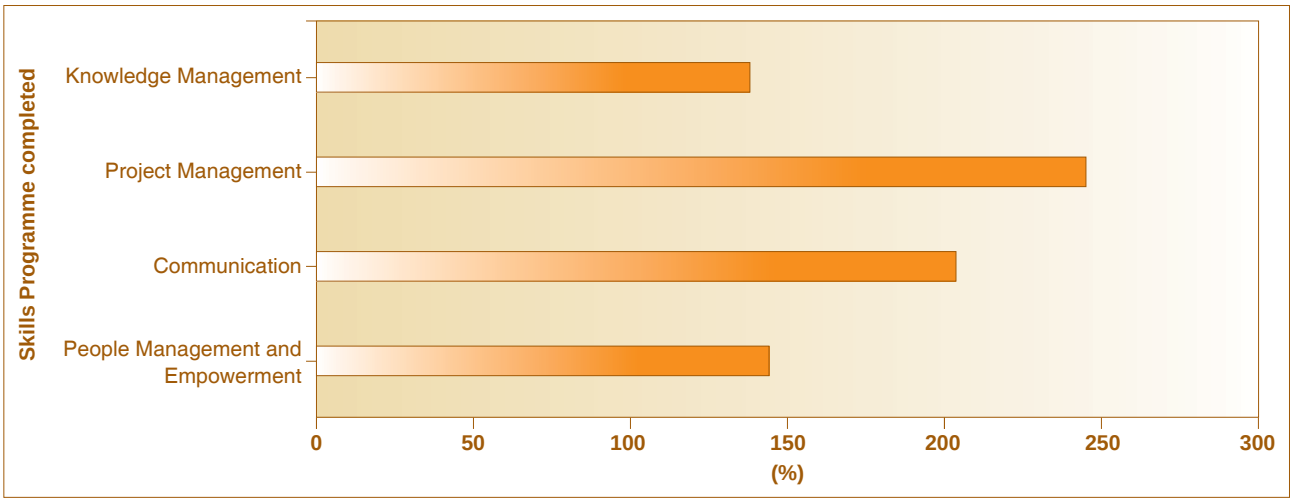

FIG. 13.2 The skills programmes completed by extension officers

13.5 Employment equity status of extension personnel

Apart from the norms and standards, the Employment Equity Act emphasises how important it is for organisations to comply with the targets relating to gender and racial representation at various categories of employment.

13.5.1 Profile of extension officers by gender

A profile of extension officers in term of gender, race, age and salary level will be presented in Tables 13.4 to 13.7.

TABLE 13.4 Gender profile of extension personnel in the provinces, n = 2 210

Males		Females	
No.	%	No.	%
1 608	73	602	27

In terms of gender, the majority of the officials are male (73 %). Only KwaZulu-Natal has a 50/50 gender representation, followed by Mpumalanga with almost a 60/40 representation. In all other provinces, the situation requires immediate attention.

13.5.2 Racial profile of extension personnel

A comparative analysis of racial representation of extension personnel is presented in Table 13.5.

TABLE 13.5 Racial profile of extension personnel, n = 2 210

Provinces	Racial profile				Total
	Africans (No.)	Coloureds (No.)	Indians (No.)	Whites (No.)	
Eastern Cape	611	0	0	12	623
Free State	55	1	0	14	70
Gauteng	27	0	0	2	29
KwaZulu-Natal	358	0	1	1	360
Limpopo	658	0	0	8	666
Mpumalanga	180	0	0	3	183
Northern Cape	7	9	0	7	23
North West	131	0	0	6	137
Western Cape	19	32	0	68	119
Total	**2046**	**42**	**1**	**121**	**2 210**

In terms of the information in Table 13.5, the majority of the officials are Africans (93 %) followed by Whites (5 %). The only provinces with a strong racial mix are Northern Cape and Western Cape.

13.5.3 Age distribution

In terms of age distribution the information is presented in Table 13.6.

TABLE 13.6 Age distribution of extension officers, n = 2 210

Age category	Gender		Total	
	Male (No.)	Female (No.)	No.	%
Less than 35 years	255	185	440	20
Greater than 35 years	1353	417	1770	80
Total	**1608**	**602**	**2210**	**100**

The population under the age of 35 is 20 %. This reflects an acceptable staff replacement rate and organisational stability.

13.5.4 Appointment levels and qualifications of officials

A comparison of extension personnel salary levels and qualifications is presented in Table 13.7

TABLE 13.7 Salary levels and qualifications of extension officers, n = 2 210

Salary level	Qualification			Total	
	Diploma	Degree	Postgraduate		
	No.	No.	No.	No.	%
4–6	292	33	5	330	15
7–8	1350	238	54	1642	74
9–10	98	49	40	187	8
11–13	7	24	20	51	2
Total	**1747**	**344**	**119**	**2210**	**100**

The majority of extension officers are employed at salary levels 7–8. This represents 74 % of the total extension personnel in the country.

13.6 Extension:farmer ratio

From the findings in Chapter 12, it is evident that Eastern Cape, KwaZulu-Natal, Limpopo and Mpumalanga have the highest shortfall of extension personnel compared to Free State, Gauteng, Northern Cape and Western Cape. The latter is attributable to the higher number of communal farmers in these provinces.

14. Recommendations

A list of recommendations is suggested, based on the analysis undertaken in Chapter 13. As a mechanism to operationalise the norms and standards in all the provinces, it is recommended that:

- The Joint Sectoral Job Evaluation Committee should initiate a work study on provincial needs for agricultural community development workers, while at the same time finalising the job evaluation of other posts as suggested in the norms and standards document.
- The Intergovernmental Technical Committee on Agriculture and Land Affairs (ITCAL) working group on Human Resources Management and Development should spearhead a process for the amendment of job and skills requirements per positions highlighted in 13.1.
- The Directorate Education, Training and Extension Services (D:ETES) should facilitate the training of extension officers in soft skills training, as outlined in the norms and standards for extension and advisory service. This could be undertaken by introducing a Frontline Extension Officers Development Programme (FEODP) and Extension Officers Management Development Programme (EOMDP), targeting managers of extension service.
- Provincial departments of agriculture facilitate the enrolment of all extension officers for B.Tech. programmes in Agriculture on a part-time basis over a 4-year period. This will allow easy translation of these officers from an agricultural development officer's status to that of agricultural advisors.
- The Provincial Department of Agriculture has to come up with strategies to redress issues of gender, disability and race in line with the Employment Equity Act.
- A further targeted study is recommended, focusing on the Eastern Cape, KwaZulu-Natal, Limpopo and Mpumalanga. The aim is to determine the most appropriate extension:farmer ratios.
- The terms of reference should include a thorough census of farmers by their scale of operation, the nature of the operation and the specific challenges that would have an impact on the setting of ratios.

Notes