PEST CONTROL

Sub-Sector Skills Plan

2020-2021

AgriSETA

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ENABLING A SKILLED AND PROSPEROUS AGRICULTURAL SECTOR

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ABBREVIATIONS AND ACRONYMS

ABBREVIATION/ ACRONYM	*DESCRIPTION*
AFASA	African Farmers Association of South Africa
AVCASA	Association of Veterinary and Crop Associations of South Africa
AgriSA	Agri South Africa
AGRISETA	Agricultural Sector Education and Training Authority
ARC	Agriculture Research Council
ATR	Annual Training Report
BMI	Business Monitor International
CoS	Centres of Specialisation
CPD	Continuing Professional Development
*DAFF [DALRRD]	*Department of Agriculture, Fisheries and Forestry [changed to Department of Agriculture, Land Reform and Rural Development in June 2019]
*DEA [DEFF]	*Department of Environmental Affairs [was changed to Department of Environment, Forestry and Fisheries in June 2019]
*DHET [DHEST]	*Department of Higher Education and Training [was merged with Department of Science and Technology and became Department of Higher Education, Science and Technology in June 2019]
FET	Further Education and Training
GAP	Good Agricultural Practices
GDP	Gross Domestic Product
HACCP	Hazard Analysis Critical Control Points
HEMIS	Higher Education Management Information System
HTFV	Hard-To-Fill Vacancies
IDP	Integrated Development Plan
IRR	Institute of Race relations
KZN	KwaZulu-Natal

NAFU	National African Farmers Union
NCV	National Certificate (Vocational)
NDP	National Development Plan
NGP	New Growth Path
NQF	National Qualifications Framework
NSDP	National Skills Development Plan
OFO	Organising Framework for Occupations
PCITA	Pest Control Industries Training Academy
PCO	Pest Control Officer/Operator
PFMA	Public Finance Management Act
QCTO	Quality Council for Trade and Occupations
SAPCA	South African Pest Control Association
SAQA	South African Qualifications Authority
SARS	South African Revenue Service
SDL	Skills Development Levy
SIC	Standard Industrial Classification
SMME	Small, Medium and Micro-sized Enterprises
SSC	Sector Skill Committee
SSP	Sector Skills Plan
Stats SA	Statistics South Africa
TLUSA	Farmers Union
TVET	Technical Vocational Education and Training
WSP	Workplace Skills Plan

* The references and information in the SSP was obtained before the merging and renaming of national government departments in June 2019.

EXECUTIVE SUMMARY

While the Pest Control sub-sector falls under the standard industrial classification (SIC) code 'Pest Control', there are other operations that should be classified as pest control but fall outside the scope of Act 36 of 1947 which governs the industry. For purposes of this sub-sector skills plan, three components of pest control are discussed:

- **Pest Control:** This is where formal operators perform pest control services mainly in the structured environment of office buildings, warehouses, factories and private households.
- **The Working for Water Project:** This government project aims at eradicating alien plants, and while it includes the application of pesticides, it is not formally part of the organised industry.
- **Farming sector:** Farmworkers apply pesticides to plants and animals. The Pesticide Management Policy for South Africa (Government Notice 1120 of 2010) promotes awareness and proper training of those working with toxic substances, but the registration of such operators on farms has not yet been formalised.

Within the context of its formal definition, the Pest control sub-sector is small. The SARS database lists 254 pest control companies, while the South African Pest Control Association (SAPCA) has 403 enterprises registered members (SAPCA, 2019). However, there are more enterprises as there are 4 600 registered pest control operators (PCOs) and a further estimated 1 150 non-registered operators, many of whom run small businesses.

The Pest Control sub-sector consists mostly of small businesses. This is evidenced by the fact that only 69 enterprises are paying skills development levy (implying that the remainder are so small that they are exempt from paying the levy).

No clear economic data is available on the sub-sector as it is not treated as a separate industry or sector in official statistics (such as Stats SA). Using conservative figures on business turnover and relative usage of chemicals, the value of the sector can be estimated at R3.3 billion per annum. (This cannot be relied upon and, at best, is indicative).

Direct permanent employment in the sector is estimated at 10 000 employees (for formal recognised businesses). Unfortunately, AgriSETA information cannot be relied upon as only seven enterprises submit the WSP/ATR.

Pest control is a male dominated sub-sector with more than 75% male employees and it employs more people (51%) who are younger than 35 years. The pest control occupation is registered on the Organising Framework for Occupations (OFO) as 'Pest Management Officer' under OFO Code 2017- 335904. However, the pest control industry comprises five distinct fields of specialty, namely:

- Structural Fumigation Management;
- Stored Agricultural Product Management;
- Wood Destroying Organism and Termite Management;
- Weed and Invader Plant Management; and
- Health and Nuisance Pest Management.

The Pest Control sub-sector is governed by Act 36 of 1947. The act stipulates that a person shall be in possession of a pest control operator registration certificate in one or more fields of pest control in order to apply pesticides for reward. Act 36 further stipulates that a person must successfully complete an accredited course, presented by a registered provider, and must complete a specific period of work experience under mentorship (supervision) of a registered pest control operator in order to obtain a certificate of registration.

The Occupational Certificate: Pest Management Officer was developed in accordance with the QCTO requirements and registered under SAQA ID 99513. This qualification addresses the knowledge, practical skills and work experience required for the five specialised fields of pest control.

The act also stipulates that any person working as a pest control assistant is required to undergo basic training in the following:

- The regulatory framework of the pest management industry;

- Pesticides and personal, public and environmental safety; and
- Application equipment for pest management interventions.

The problem experienced by newcomers who desire to enter the pest control industry is:

- The cost of training a course.
- The cost of accommodation.
- Non-productive until qualified.
- Unavailability of mentorship to gain work experience.

Furthermore, the fact that training courses provided are not accredited with AgriSETA currently presents a serious problem for the Pest Control sub-sector. It is foreseen that over the next five years there will be an escalation of training activities in pest control. This can be ascribed to four reasons:

- The Pest Control sub-sector is moving towards e-learning. It is seen as a solution to small operators who cannot attend or afford formal training courses, but have access to the internet via laptops and smart phones that provide immediate access to advice and learning anywhere and anytime. The pest control e-learning platform was launched in January 2019.
- It is expected that the intervention of the Department of Agriculture, Land Reform and Rural Development (DALRRD) [previously the Department of Agriculture, Forestry and Fisheries (DAFF)] with unregistered operators will result in an increase in formalised training to prepare such operators to meet requirements for registration.
- It is expected that more projects similar to the Working for Water Project will be launched by government; this can result in a greater need for training.
- It is expected that more pressure will be applied to ensure that farmworkers who work with toxic substances are properly trained and certificated to do so. This can create a very large training demand as there are approximately 35 40 000 commercial farming enterprises in South Africa. If only two workers per farm are trained, on average there will be a need to train as much as 70 000 – 80 000 commercial farmworkers. This excludes the myriad of small-scale and non-formal farming enterprises.

RESEARCH PROCESS AND METHODS

AgriSETA carried out various research projects to produce the Pest Control Sub-sector Skills Plan 2020-2021. The research was conducted through a mixed methodology of qualitative and quantitative techniques. The table below summarises the research process and methods used to construct this sub-sector skills plan.

TABLE 1: RESEARCH PROCESS AND METHODS

Research Topic	Nature (Design) of the study	Purpose	Data Collection	Sample Size	Timeframe
Chapter 1: Sector Profile					
Scope of coverage of the sector	Quantitative	Gives an overview of the sector	AgriSETA employer data	All AgriSETA employer data for 2018/19	May–July 2019
Key role-players in the sector	Quantitative	Investigate key role-players	WSPs/ATRs data	All WSPs received for 2019	May–July 2019
Economic performance	Quantitative	Examine economic performance in the sector	WSPs/ATRs data	All WSPs received for 2019	May–July 2019
Employer profile	Quantitative	Examine employment trends	WSPs/ATRs data	All WSPs received for 2019	May–July 2019
Labour market profile	Quantitative	Examine employment trends	WSPs/ATRs data, Statistics SA	All WSPs received for 2019	May–July 2019
Chapter 2: Key Skills Issues					
Drivers of change for the agricultural sector	Qualitative	Identify skills priorities and change drivers in the agricultural sector	Interviews and focus groups	60 SSC members, 4 focus groups	August 2019
Policy frameworks affecting skills demand and supply	Qualitative	Analyse sectorial policy frameworks	Interviews and focus groups	60 SSC members, 4 focus groups	August 2019
Chapter 3: Occupational Shortages and Skills Gaps					
Critically evaluate the AgriSETA critical and scarce skills list and provide an overview of the skills gap	Qualitative	To provide the sectoral occupational demand, extent and nature of supply	Focus groups WSPs/ATRs data	All WSPs/ATRs data received for 2019, 60 SSC members, 4 focus groups	August 2019
Identification of Sectoral Priority Occupations (PIVOTAL)	Qualitative	Formulate Sectoral Priority Occupations (PIVOTAL)	WSPs/ATRs interviews	All WSPs/ATRs data received for 2019, 11 employer surveys, 60 SSC members	August 2019

Research Topic	Nature (Design) of the study	Purpose	Data Collection	Sample Size	Timeframe
Chapter 4: Partnerships					
Analysis of planned and existing SETA partnerships	Qualitative	Ascertain the AgriSETA partnerships	Interviews	All AgriSETA departments	May–July 2019
Chapter 5: Skills Priority Actions					
Key skills findings from previous chapters	Quantitative	Provide synthesis of previous chapters in the SSP and recommendations of priority actions	NONE	NONE	On-going

DOCUMENT REVIEW

A document review was conducted to establish the economic performance and trends of the Pest Control sub-sector, geographic concentration and employers. Government policy and strategy documents, as well as the key statistical and industry publications were reviewed and these are included in the list of references. A thematic analysis was conducted to synthesise the key economic, policy and training issues affecting the Pest Control sub-sector and to identify key skills issues. The table below summarises the research process and methods used to develop this sub-sector skills plan.

SCARCE AND SECTORAL PRIORITY OCCUPATION LIST (PIVOTAL) FORMULATION

The scarce skills, skills gaps and Sectoral Priority Occupations (PIVOTAL) lists were arrived at through both secondary data analysis and the numbers made available in previous sector skills plans, large and small workplace skills plans (WSPs), large and small annual training reports, (ATRs), and primary data analysis obtained at the two-day AgriSETA Stakeholder Conference (28 February to 1 March 2019). Interviews and data collection forms the basis of the formulation of the Sectoral Priority Occupation List (PIVOTAL) .

SUMMARY OF KEY FINDINGS

Priority skills in the Pest Control sub-sector are:

- **Business acumen** (such as identifying and starting a new business) and basic business planning (such as setting targets, resource planning, financial and operational plans). The existing NCV programmes can be tailored to meet the needs of the pest control sub-sector and become a foundation programme to develop new entrants.
- **Technical skills** relating to the use of chemicals. Technical skills programmes are largely in place, but more effort is needed to engage with those who are operating illegally, those working in the Working for Water Project and especially the thousands of farmworkers who engage on a daily basis with pesticides, who manage chemical stores and who are involved in the transportation and application processes. Act 36 of 1947 is quite clear that all persons applying herbicide, pesticide or any agricultural remedy must be registered.
- **Mentoring skills** so as to develop a pool of mentors who can assist PCOs in their development as professional operators and to assist them in creating sustainable businesses. Pest control operators (PCOs) need to do on average six months' workplace practical under a registered operator/officer.
- **New product knowledge and skills** through Continuing Professional Development (CPD) short programmes that focus on new product information and ensure that existing operators are trained to correctly use and apply new products.

The following are critical issues in the Pest Control sub-sector that need to be addressed:

1. New developments in the industry and technology.
2. New methods of pesticides application
3. Bring pest control operators up to speed with new developments, technology and practices in the industry.
4. All registered pest control operators to obtain the required CPD points within the 3-year registration period in order to renew their registration.

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CHAPTER 1
SECTOR PROFILE

1.1. INTRODUCTION

This chapter provides an overview of the agricultural sector, paying particular attention to the Pest Control sub-sector in South Africa. The first section looks at the scope of the Pest Control sub-sector's coverage. The second section describes stakeholders and key role-players in the Pest Control sub-sector.

The third section looks at the economic performance of the overall agricultural sector, zooming into the contribution of Pest Control to the South African economy. The fourth section explores the employer profile, based on the AgriSETA WSP/ATR data submitted for 2019/20. The last section provides a labour market profile and explores the number and demographics of the people employed in the sub-sector. Essentially, the chapter is intended to set the scene for the skills issues that are delved into in subsequent chapters.

1.2. SCOPE OF COVERAGE

The scope of AgriSETA covers the agricultural sector, from input services to a farm, to activities on a farm and first level processing activities on a farm. The pest control sub-sector is classified into a single economic activity. The table below outlines the formal demarcation of the pest control sub-sector according to standard industrial classification (SIC) codes and focus area.

TABLE 2: ACTIVITIES WITHIN THE PEST CONTROL SUB-SECTOR BY STANDARD INDUSTRIAL CLASSIFICATION CODE

SUB-SECTOR	SIC CODE	SIC Description
Pest Control	99003	Pest Control

Source: AgriSETA, 2019/20

Although pest control activities are clustered under one SIC code, the table below illustrates that the sub-sector is comprised of three major sections:

- Pest control where formal operators deliver pest control services mainly in the structured environment of office buildings, warehouses, factories and private households.
- The Working for Water Project is a government project aims at eradicating alien plants and while it includes the application of pesticides, it is not formally part of organised industry.
- Farming sector where farmworkers apply pesticides to produce and animals. Whilst the Pesticide Management Policy for South Africa (Government Notice 1120 of 2010) promotes awareness and proper training of those working with toxic substances, the registration of such operators on farms has not been formalised.

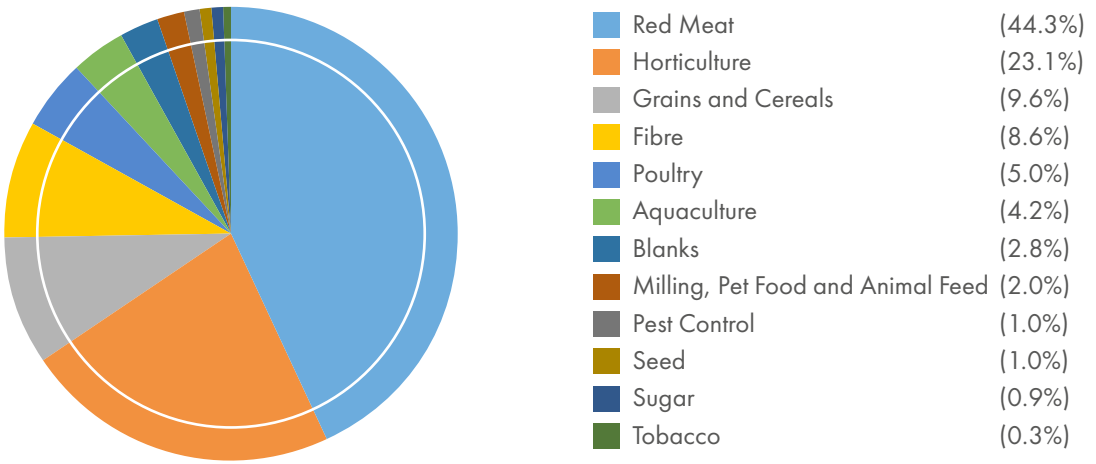
TABLE 3: PEST CONTROL LIST OF DEFINITIONS

PEST CONTROL	DEFINITION
Pest Control	Servicing the commercial, industrial and domestic sectors of the economy and is governed by Act 36 of 1947.
Working for Water Project	A project of the Department of Environmental Affairs (DEA) with two main aims namely to eradicate invasive alien plants (especially in river beds and dams) and it also serves as a job creation project for youth. The problem is that it does not allow for any job creation after completion of such projects These projects generally have a very short lifespan and are limited to relatively small geographical zones. The DEA became the DEFF (Department of Environment, Forestry and Fisheries) in June 2019 and is expected to continue this project.
Farming sector	In the farming sector, farmworkers apply pesticides, fertilisers and herbicides, very frequently without any restriction whatsoever, no qualifications and no accreditation. Workers use highly toxic products and often unskilled labour are used to do this work. This has an effect on the food chain and the quality that is put on the table.

Source: AgriSETA Employer Data, 2019/20

Overall, the agricultural sector consists of 11 sub-sector committees that represent their industry interest to AgriSETA. These are 1) Red Meat; 2) Horticulture; 3) Grains and Cereals; 4) Fibre; 5) Aquaculture; 6) Poultry; 7) Milling, Pet Food, and Animal Feed; 8) Pest Control; 9) Seed; 10) Sugar; and 11) Tobacco. The total number of employers registered in the employer database for 2019/20 is 26 181. The Red Meat sub-sector remains the biggest on the AgriSETA employer data, followed by the Horticulture sub-sector, Grain and Cereal, and Fibre. The lowest percentages are found in Milling, Pet Food & Animal Feed (2%), and Pest Control, Seed, Sugar (1%) and Tobacco (0.3%). The graph below outlines the relative size of membership number by sub-sectors, as captured in the AgriSETA employer database of 2019/20.

FIGURE 1: DISTRIBUTION OF AGRICULTURAL ENTITIES BY SUB-SECTOR



Source: AgriSETA Employer Data, 2019/20

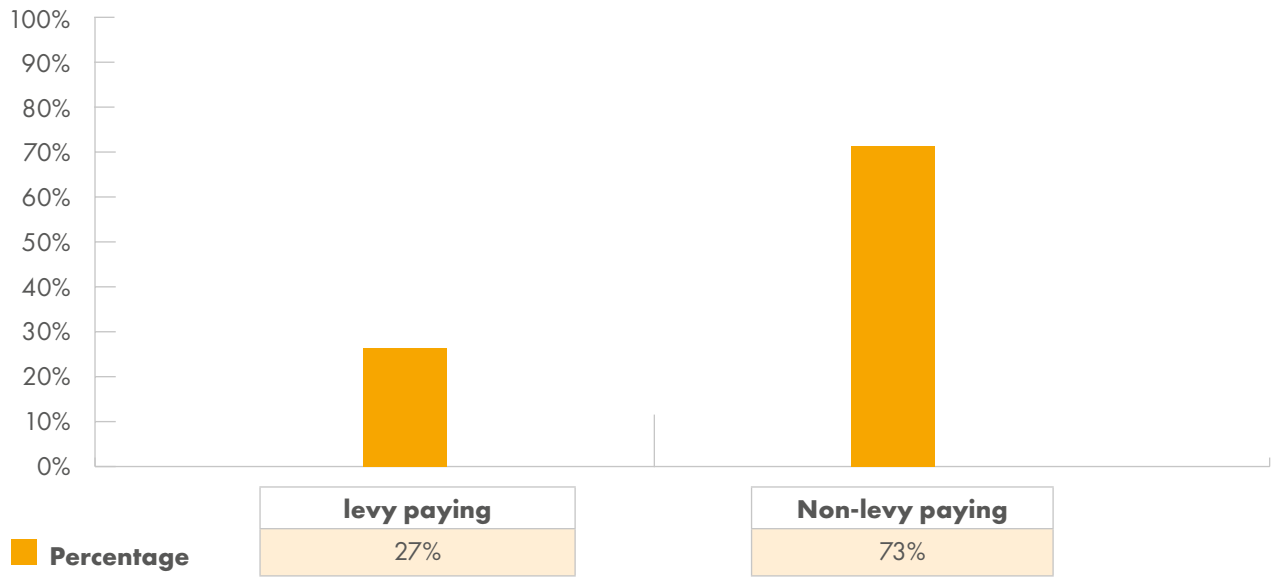
REVENUE FROM SKILLS DEVELOPMENT LEVIES

In 2019/20, the value of SDL paid by the Pest Control sub-sector was R1 904 940. This levy was collected from 69 levy payers. The graph below shows that only 27% of the Pest Control entities registered with SARS contribute to SDL. This is understandable as this is largely a SMME sector and relatively very few small companies submit the WSP/ATR (because the effort does not justify the mandatory grant to be received from the SETA).

In summary, the Pest Control sub-sector represents 1% of enterprises paying SDL to the AgriSETA. This, however, does not mean that the sector is not important and can be ignored or side-lined. To the contrary – though it is small and consists mainly of SMMEs, the sub-sector has a very important role to play and its role in the primary agriculture sector could be dramatically expanded once the notion of having properly certificated farmworkers applying toxic substances is established and enacted.

It is important for AgriSETA to address the issue of demarcation of the cleaning sector (currently demarcated to the Services SETA) as some pest control companies are registered with that SETA. Therefore, the SDL contribution to the AgriSETA is not a true reflection of the size of the pest control sub-sector.

FIGURE 2: SKILLS DEVELOPMENT LEVIES



Source: AgriSETA Employer Data, 2019/20

1.3. KEY ROLE-PLAYERS

There are public and private key role-players in the agricultural sector that contribute towards its functioning. They include national government departments, sector representatives and industry bodies. The table below groups these role-players according to their strategic contribution to the sector. Please note that while it is comprehensive, this list is not exhaustive.

TABLE 4: KEY AGRICULTURAL ROLE-PLAYERS

Strategic contribution	Department or organisation	Relevance to agricultural skills development
Skills Development and Research	Department of Basic Education	Quality of education of entrants to labour market,career awareness programmes to expose agriculture as a possible career choice
	Department of Higher Education and Training *[changed to Department of Higher Education, Science and Technology in June 2019]*	Responsible for TVETs, HETs, agricultural colleges and skills development. Sets the national skills development agenda through regulation of SETAs.
	Statistics SA	Provision of updated statistics on agricultural sector economics & labour force
	Agricultural Research Council	Scientific research on agricultural production issues
Strategy and Policy	Department of Trade and Industry & Provincial Departments of Economic Development *[changed to Department of Trade Industry and Competition in June 2019]*	Industrial strategy, international trade agreements, agricultural sector strategy and policy implementation desk
	Department of Agriculture Forestry and Fisheries *[changed to Department of Agriculture, Land Reform and Rural Development in June 2019]*	Sector regulatory framework, strategy and leadership, provision of extension services, Broad Economic Empowerment funding of development interventions including provision of bursaries for scarce skills
	National Treasury & SARS	Financial planning, incentives, accountability of Land Bank, skills levies
Planning	Department of Labour	Labour legislation, wage determinations, employment equity
	Department of Economic Development *[changed to Department of Economic Development and Tourism]*	Sector economic strategies
	National Planning Commission	Identify inter-departmental overlaps and gaps
	Department of Environmental Affairs *[changed to Department of Environment, Forestry and Fisheries in June 2019]*	Policy and guidelines on environment protection and natural resource management, partner in environmental education
	Department of Transport	Planning for transport needs in rural areas.

Strategic contribution	Department or organisation	Relevance to agricultural skills development
Rural Development and Land Reform	Department of Rural Development and Land Reform *[changed to Department of Agriculture, Land Reform and Rural Development in June 2019]*	Partnering with AgriSETA in mobilising funds for capacity building of claimants
	Department of Co-operative Governance and Traditional Affairs plus municipalities	Linking agricultural and rural development to IDPs and LED, infrastructure and services to agricultural enterprises
Services	Department of Water Affairs	Water boards manage local irrigation schemes
	Department of Energy	Strategy to supply electricity to rural areas
	South African Police Service	Collaboration with agricultural community to address issues of farm security, including attacks, stock and property theft
Credit and assistance	Land and Agricultural Development Bank of South Africa	Financial services to commercial farming sector, agribusiness, and emerging farmers
	Micro-Agricultural Financial Institutions of South Africa (MAFISA - DAFF) and the Comprehensive Agriculture Support Programme (CASP- DAFF).	Production loans to smallholder operators.
	The dtic and DALRRD Aquaculture Development and Enhancement Programme (ADEP)	Broad based support to the aquaculture industry especially through grants for new projects and the upgrading expansion of existing projects
Union and Sector representatives	Agri South Africa (AgriSA)	Agricultural Union serving some 32 000 large and small commercial farmers
	National African Farmers' Union of South Africa (NAFU)	Represents black farmers to level the field in all agricultural matters
	The African Farmers' Association of South Africa (AFASA)	Represents commercial African farmers to bring black commercial farmers into mainstream agribusiness
	Transvaal Agricultural Union South Africa (TAU SA)	A national agriculturalunion serving commercial farmers
Agribusiness	Agricultural Business Chamber	Fosters a favorable agribusiness environment
	Grain SA	Conglomerate organisation providing commodity strategic support and services to South African grain producers to support sustainability

Source: 2015 GCIS Handbook, Agriculture and AgriSETA SSP 2011-2016

While the above is relevant to the agricultural sector at large, certain key role-players need special mention when one considers the Pest Control sub-sector. These are summarised in the table below.

TABLE 5: KEY PEST CONTROL ROLE-PLAYERS

Strategic contribution	Department or organisation	Relevance to agricultural skills development
Compliance and Skills Development	Department of Agriculture, Forestry and Fisheries – Act 36 of 1947 [changed to Department of Agriculture, Land Reform and Rural Development in June 2019]	Registering pest control operators (PCOs). Identifying non-compliant PCOs and assisting them in becoming compliant. Take a leading role in making farm workers working with pesticides compliant.
	Department of Environmental Affairs [changed to Department of Environment, Forestry and Fisheries in June 2019]	Ensuring that participants in the Working for Water Project are properly trained, equipped and compliant.
Advocacy	SAPCA, AgriSA, TLUSA, AFASA, NAFU, Crop Life	Engage with farmers, create awareness of the importance of compliance, promotion of dedicated skills development interventions relating to pest control on farms.

1.4. ECONOMIC PERFORMANCE

OVERVIEW

The gross domestic product (GDP) forecast for South African's total, annual growth rate had an increase of 1% from 2018 to 2019 (OECD,2019). According to Stats SA agriculture, forestry and fishing industry has increased by 7.9% Furthermore, the sector contributed 0.2% to GDP growth. The growth was due to an increase in the production of field crops.

The Pest Control sub-sector, although being very important, is in economic terms a very small element of the agricultural contribution to GDP and minute in the context of national GDP.

ECONOMIC OUTLOOK OF THE SUB-SECTOR

No organised, official data is available on the size of the pest control industry – it is not treated as a separate, identifiable sub-sector within the economy. However, using the available information, it is possible to create some indication of the industry in economic terms.

If it is assumed that 4 000 of the estimated 4 600 PCOs are active and generate a turnover of only R60 000 per month, the monthly turnover of the industry can be estimated at R240 million or approximately R2.8 billion per annum.

Should one estimate that the cost of chemicals is about 15% of turnover, it means that the value of chemicals consumption is in the region of R36 million per month or R432 million per annum.

These figures combined means that the value of the sector is approximately R3.3 billion per annum.

Not much reliance should be placed on the above figures as:

- they represent very crude calculations, and
- they exclude very large components of the industry (such as pest control on farms, commercial and under resourced, and any special projects such as the Working for Water Project.

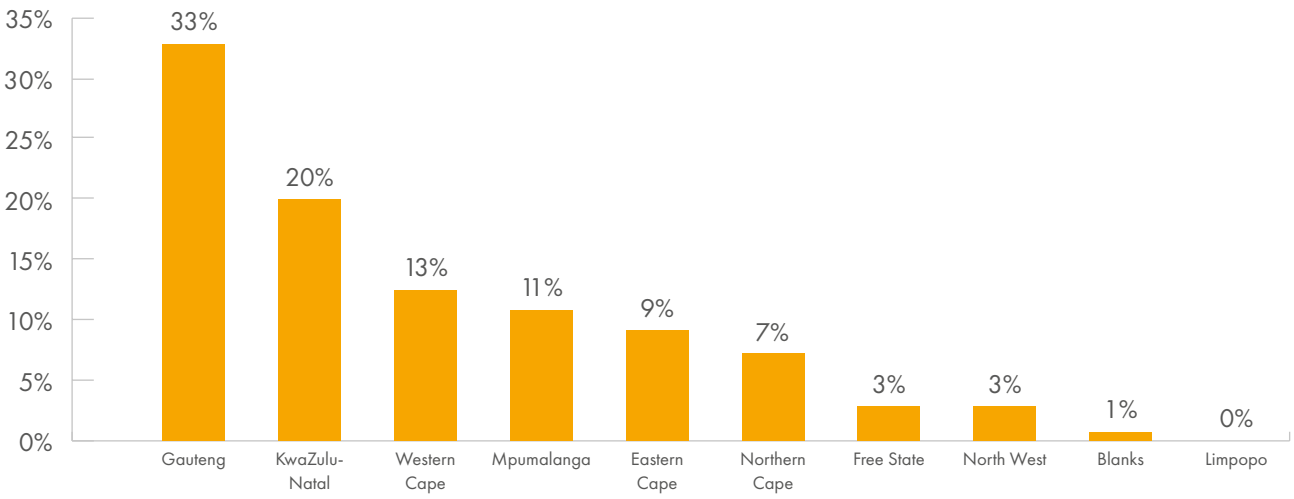
They, however, show that the Pest Control sub-sector is miniscule in the context of the South African economy.

1.5 EMPLOYER PROFILE

Different to other sub-sectors, it is not possible to draw reliable information from the WSP/ATRs received by AgriSETA from the industry. According to the South African Pest Control Association (SAPCA) there are 403 enterprises registered with them, the SARS database identifies 254 enterprises and only 69 of these contribute to SDL which comes to the AgriSETA. It is also estimated that SAPCA represents only one-third of official employers. It can therefore be assumed that there are most likely more than 1 000 formal enterprises and many more non-registered or informal operators.

Using the paying companies SDL as a proxy, for provincial distribution of Pest Control entities, it is clear from the following graph that approximately 77% of all pest control enterprises in the country are found in Gauteng, KwaZulu-Natal, Western Cape and Mpumalanga. Gauteng leads on the entities paying SDL to AgriSETA, followed by KwaZulu-Natal, Western Cape and Mpumalanga. The other provinces have less than 10%.

FIGURE 3: PROVINCIAL DISTRIBUTION OF PEST CONTROL ENTITIES



Source: AgriSETA Employer Data, 2019/20

1.6. LABOUR MARKET PROFILE

Given that the Pest Control sub-sector is represented by approximately 403 enterprises, it should be noted that due to the very low rate of submission of WSP/ATRs, information on the labour market profile is tentative and vague in nature.

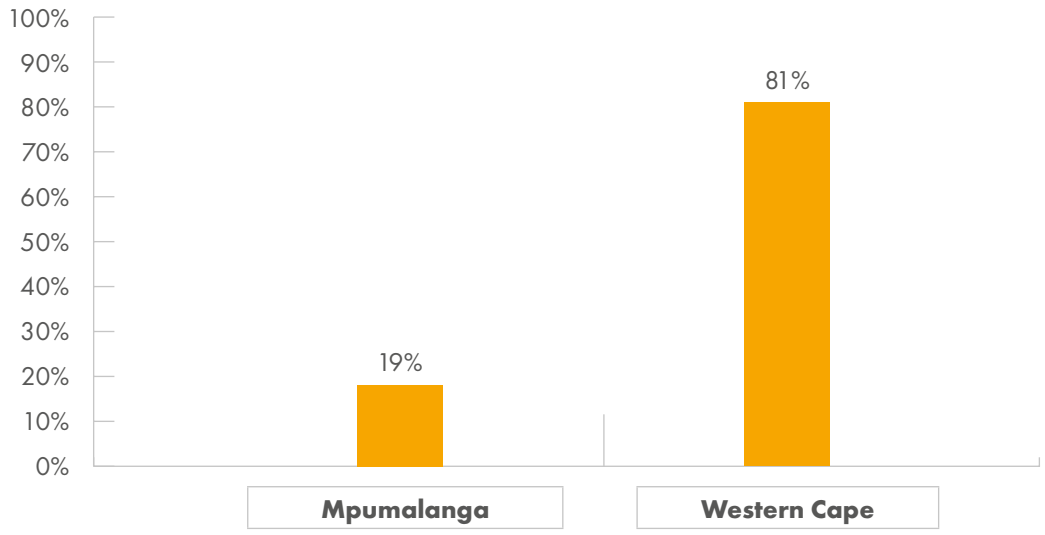
In general, the sub-sector employs males in the age category 25 – 40 years. Education levels are low – the average education of a pest operator is Grade 10 and for other workers it is generally less than Grade 6. The average pest control technician salary in 2019 ranges between R55 000 to R135 000 per annum (Pay Scale, 2019)

PROVINCIAL DISTRIBUTION OF EMPLOYEES

AgriSETA data base reflects that a mere 772 people are currently employed as permanent employees (AgriSETA information is limited to those submitting the WSP/ATR). Furthermore, it should be realised that the industry employs other workers besides pest control operators (PCOs). However, PCOs are at the core of the business of Pest control companies.

The figure below outlines the pest control employment distribution by provincial breakdown. The AgriSETA WSP submissions show that the Pest Control sub-sector is concentrated in the Western Cape (81%), with the remaining 19% of employees found in Mpumalanga.

FIGURE 4: PROVINCIAL PERMANENT DISTRIBUTION OF PEST CONTROL EMPLOYEES

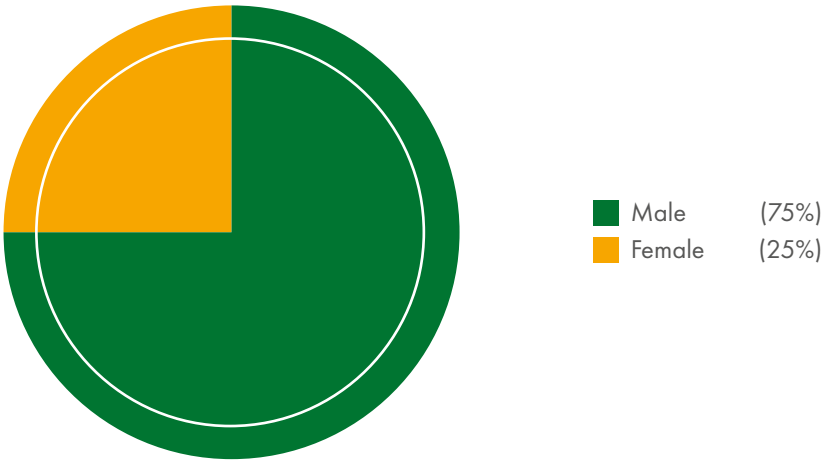


Source: AgriSETA WSP Submissions, 2019/20

GENDER

The chart below gives a breakdown of the Pest Control sub-sector by gender as reported in the WSP submissions (2019/20). Data shows that the highest proportion of employees are male, accounting for 75% of total employment, while females make up the other 25%.

FIGURE 5: EMPLOYEES BY GENDER

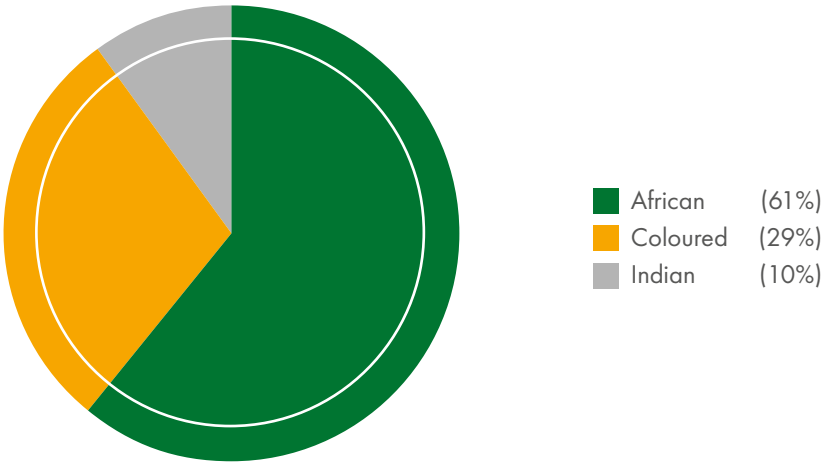


Source: AgriSETA WSP Submissions, 2019/20

RACE

The WSPs (2019/20) show that the vast majority of employees in the sub-sector are black Africans (61%), followed by coloured employees (29%), and white employees (10%).

FIGURE 6: EMPLOYEES BY RACE

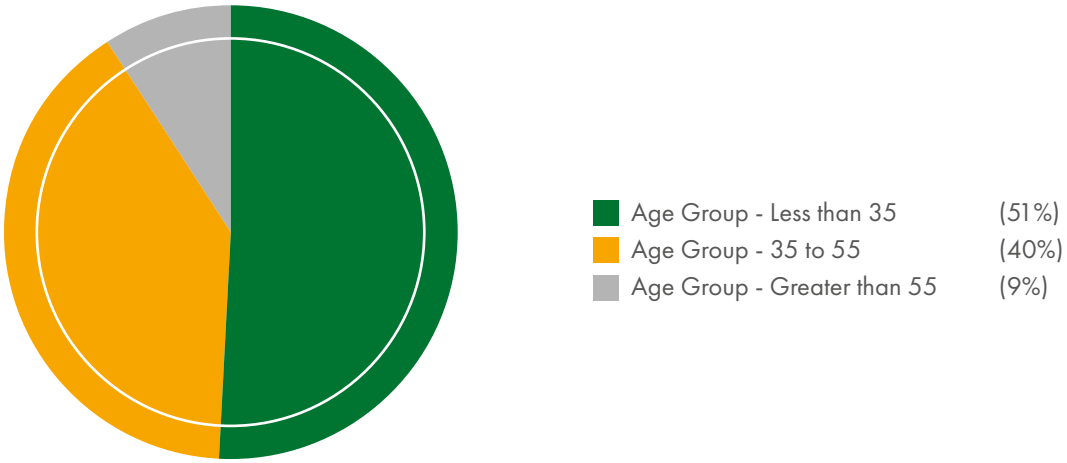


Source: AgriSETA WSP Submissions, 2019/20WSP

AGE

The majority of people employed in the Pest Control sub-sector (by employers that submit WSPs) are below the age of 35 (51%); followed by employees between the age of 35 and 55 (40%); while employees older than 55 years account for 9% of employees in the sub-sector.

FIGURE 7: EMPLOYEES BY AGE



Source: AgriSETA WSP Submissions, 2019/20

OCCUPATIONAL CATEGORIES

No official information on key occupational categories is available. However, the sub-sector lists the following five occupations (in order of priority):

TABLE 6: KEY PEST CONTROL OCCUPATIONS

PRIORITY	OCCUPATION CODE	OCCUPATION
1	No OFO code	Pest Control Operator/Officer
2	2017-335904	Pest Management Officer
3	2017-821401	General worker/garden worker/trainee PCO
4	2017-243301	Sales representative (industrial products)
5	2017-134903	Small business manager

1.7. CONCLUSION

Pest control is the smallest sub-sector demarcated to the AgriSETA. There are approximately 403 formally registered pest control entities with the SAPCA.

Although it is a small sub-sector, pest control is critically important for the wellbeing of the whole country and its people. Urgent attention is required to address the current situation where the vast majority of persons working with pesticides are farmworkers that do not have the necessary knowledge, skills and formal registration.

CHAPTER 2
KEY SKILLS ISSUES

2.1. INTRODUCTION

This chapter focuses on the alignment of skills planning to national strategies insofar as it has relevance to the pest control sub-sector. It also identifies factors that drive change in the sub-sector; factors that influence the need for particular skills sets or render them irrelevant in an ever-changing world.

2.2. CHANGE DRIVERS

Change drivers were identified through a thematic synthesis of internal stakeholders' views, policy documents, existing research and stakeholder engagement. It was ensured that sufficient engagement took place via sub-sector committee sessions and that the needs of the under-resourced players were taken into consideration.

LAND AND AGRARIAN REFORM

As land reform progresses, so does the need to develop new entrants into the primary agricultural production arena. However, a relatively small SETA such as the AgriSETA has, by no means, sufficient funding to address the needs of the under-resourced sector. Each and every focus group (irrespective of whether they farm with livestock or plants, or both) raised the matter of pest control knowledge and management as one of their priority skills needs.

AGRICULTURAL STRUCTURES

One of the major drivers of change is the formation of new agricultural farming structures. These range from CPAs, to trusts, private companies and co-operatives. These structures have one common denominator: farming collectively. If not well managed, it creates tension and conflict. Thus, while this sub-sector skills plan focuses on the pest control sub-sector, initiatives cannot be implemented without addressing governance matters first.

COMMERCIAL AGRICULTURE

Good Agricultural Practices (GAP), Hazard Analysis Critical Control Points (HACCP) and many other protocols as enforced by large food retailers (locally such as Pick n Pay and Woolworths and internationally such as Waitrose and Marks & Spencer's) require farmers to be compliant and responsible across many areas of operation – this includes working with, storing and applying toxic substances. Thus from a pest control perspective, commercial agriculture will have to progress from the current non-registered and minimally trained farmworkers to properly trained and certificated PCOs.

THE GREEN ECONOMY

There is an increasing emphasis on the green economy in government policy documents (see, NDP, NGP). In the agricultural sector, this refers to the use of environmentally sustainable farming practices. Sustainable practices require new knowledge and skills that cut across farming enterprises of all sizes. The need for green knowledge is conveyed through industry specific training interventions across different sub-sectors. Although there is a tendency to limit discussion on the green economy to renewable and efficient energy, the green economy also entails the progression to environmentally friendly pesticides that are less harmful to humans.

PLANT PEST AND DISEASE

Due to drought and climate change, plants are getting attacked by various pests and diseases. Some of these attacks are new infestations which are resistant to the available pests and diseases control methods.

2.3 ALIGNMENT OF SKILLS PLANNING TO SUB-SECTORAL STRATEGIES AND PLANS

The following section draws attention to the national strategy and planning documents that frame AgriSETA's mandate for skills development. The legislative and policy frameworks speak to AgriSETA's constitutional mandate as a public institution governed by the PFMA to develop skills programmes in accordance with the Skills Development Act (1998), the Skills Development Levies Act (1999) and the National Qualifications Framework Act (2008).

There are two seminal strategic documents that underpin AgriSETA's mandate for skills planning, namely: the White Paper on Post School Education & Training (2013) and the National Skills Development Plan 2030 (NSDP) Both these documents highlight the SETAs roles in developing clear, sector specific linkages between education and the workplace through an analysis of the demand and supply of skills in their sector. These documents call for credible institutional mechanisms for skills planning, programmes that are occupationally oriented, and responsive higher and further education and training institutions. Furthermore, attention should be given to the needs of local, community enterprises, co-operatives and the like, with a focus on developing their skills capacities to meet the needs of their particular environments, thereby closing the gap between the rural and urban South African economies.

The proper training and registration of people that apply pesticides is a crucial requirement in the pest control sub-sector. Such registration serves to (i) protect the individuals as they work with highly toxic substances and to (ii) ensure that pesticides are applied correctly so that it has a minimal effect on other living organisms, animals and humans (other than that targeted by the application). Registration is a legal requirement in terms of Act 36 of 1947. Registrations are categorised under the following main categories:

- Weed control
- Fumigation
- Structural pest control
- Plant pests
- Aerial application
- Wood preservation
- Termite control

All of these seven categories are equally important for skills development purposes. From an alignment perspective, it is foreseen that over the next five years there will be an escalation of training activities in the Pest Control sub-sector for four reasons (across all categories listed above);

- The Pest Control sub-sector is moving in a planned manner towards e-learning. It is seen as a solution to small operators who cannot always attend or afford formal training courses, but have access to the internet via laptops and especially smart phones giving them immediate access at the worksite to advice and learning. E-Learning started in January 2019.
- It is expected that government's [Department of Agriculture, Land Reform and Rural Development (DALRRD)] intervention with unregistered operators will result in an increase in formalised training to prepare such operators to meet requirements for registration.
- It is expected that more projects similar to the Working for Water Projects will be released by government, which will result in a greater need for training.
- It is expected that more pressure will be applied to ensure that farmworkers who work with toxic substances are properly trained and certificated to do so. This can become a very large training need as there are approximately 35 – 40 000 commercial farming enterprises in South Africa. If only two workers per farm are trained, on average there will be a need to train as many as 70 000 – 80 000 commercial farmworkers. This excludes the myriad of small-scale and non-formal farming enterprises.

Top on the priority list of skills needed in the sub-sector is business acumen. It is imperative to enable existing as well as new and small operators to run successful and sustainable businesses. Many small businesses fail within a relatively short period of time due to a lack of business acumen. The training focus should be on how to start a business; how to do business planning; and how to manage a business' financial affairs.

The second priority is that of technical skills. Pest control operators work with highly toxic material and need to understand not only how to use it, but also the impact it has on humans, animals and the environment. Coupled with this is the fact that pesticides are evolving constantly and new products enter the market. Due to the growing emphasis on the so-called green economy, there is pressure on the industry to migrate towards environmentally friendly products that will not be harmful at primary level (where and when applied) but also at a secondary level (those that are affected while not the original aim, e.g. birds coming in contact with pesticides). Though pest control is not a highly complex, there is therefore a requirement to upgrade skills on a continuous basis and the need for practical training. Well-planned, industry-wide CPD programmes are essential.

The third priority is that pest control operators must renew their certificates every three years. In many cases the renewal must be preceded by refresher courses. This should form part of the CPD of pest control operators.

2.4 IMPLICATIONS FOR SKILLS PLANNING

The legislative and policy frameworks established by government, coupled with the contextual change drivers and industry specific perspectives on skills development, point to five skills implications that need to be addressed in the Pest Control Sub-sector Skills Plan.

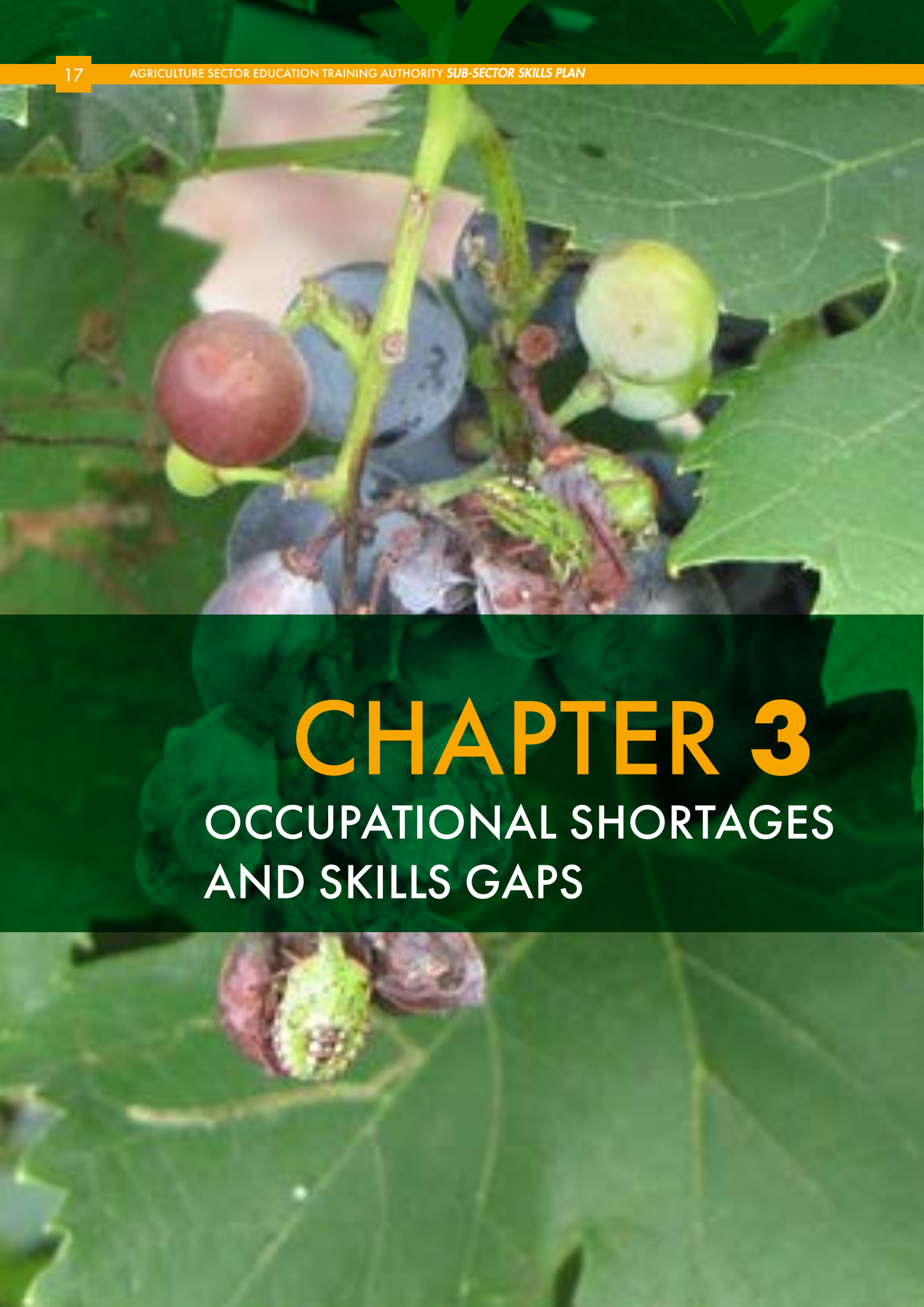
KEY SKILLS IMPLICATIONS

1. Develop a pool of experienced pest control practitioners to assist new entrants into the sub-sector (including those that were traced and legalised by DAFF) in establishing sustainable small businesses.
2. Focus on entrepreneurship and enterprise development programmes, and offer mentoring services.
3. Extend pest control training to Working for Water Project participants and farmworkers.
4. Focus specifically on the training of under-resourced farmers in the application and management of pest and disease control.
5. Develop specific CPD programmes to ensure that the sub-sector (and specifically PCOs) stays up to date with developments and become more sensitive towards the green economy. CPD is embedded in the requirement that each PCO must renew his/her registration every three years.

2.4 CONCLUSION

The proper training and registration of people that apply pesticides is a crucial requirement in the pest control sub-sector. The fact that many people who work in pest control are unregulated, is a matter of concern.

It is necessary that people involved in initiatives such as the Working for Water Project (where large numbers of young people work with pesticides) and farmworkers (commercial and small-scale) be exposed in a structured and regulated manner to training in pest control products, methods and safety. It may not be necessary for each and every person working with pesticides to become formally qualified as PCOs, but it must be compulsory for them to receive training in certain elements. The sub-sector must develop mechanisms to ensure CPD and engage mentors to assist new entrants to the industry. Much has already been done and the launch of the new e-learning platform in January 2019 is expected to increase access to training.



CHAPTER 3

OCCUPATIONAL SHORTAGES AND SKILLS GAPS

3.1. INTRODUCTION

Chapter 3 reflects skills demand and supply in the Pest Control sub-sector. In contrast to other sub-sectors, pest control does not have sufficient workplace skills plan (WSP) and annual training report (ATR) information from which to draw reliable conclusions.

Much of the information reflected is qualitative and indicative in nature as there are no formal statistics about the sub-sector. Pest control is not recognised as an economic sector; it is seen as an integral part of other economic sectors and therefore no reliable quantitative information on skills demand and supply is available.

The key themes emerging from this chapter corroborate the skills implications identified at the end of Chapter 2. It is relatively easy to enter the Pest Control sub-sector and unfortunately there are quite a number of unregistered operators whose actions and practices are not governed. The Department of Agriculture, Land Reform and Rural Development (DALRRD) is in the process of enforcing compliance.

3.2. EXTENT AND NATURE OF DEMAND

In general, it is not difficult to fill vacancies in the Pest Control sub-sector. However, the quality and skills levels of recruits are frequently problematic. This is especially true for pest control operators (PCOs). In order to fill the gap between a qualified PCO and a highly competent PCO, there needs to be a period of professional mentorship for PCOs. Professional mentors are scarce and as a result, the practical training and mentoring becomes costly. The sub-sector will have to invest in creating a pool of professional mentors.

TABLE 7: GENERAL PRIORITY SKILLS FOR THE PEST CONTROL SUB-SECTOR

Constituency	General priority skills for the Pest Control Sub-sector
Existing Formal Pest Control Businesses	• Training PCOs to comply with registration requirements • CPD short courses focussing on new technologies and environmentally friendly products.
New Formal Pest Control Businesses	• Business acumen • Mentorship • Technical PCO skills
Working for Water Project	• Safe handling of toxic substances • Apply effective weed control
Farmworkers	• Safe handling of toxic substances • Application of pesticides in different contexts • Chemical store keeping – good practices

Source: AgriSETA, ATR Data, 2019/20

SCARCE AND TOP-UP SKILLS

Although it is generally not difficult to fill vacant posts, the quality of the skills of new recruits is frequently not up to standard. This therefore implies that there is a need for topping up existing skills and so enable the people to perform better and be more productive.

Pest Control Operators

Pest control operators (PCOs) are at the core of the Pest Control sub-sector. Once recruited, they are trained and registered with the Department of Agriculture, Land Reform and Rural Development (DALRRD). This implies that effectively one cannot apply pesticides without being registered and in turn this implies one has to be trained to meet the legal requirements of a PCO.
The training is not limited to compliance only. The pest control industry evolves and new products enter the market. This happens mainly for two reasons: (i) pests become immune to existing pesticides and (ii) the sub-sector is becoming more sensitive to the 'green' imperative.

The need for training is relevant to the 4 600 formally registered PCOs and over time will also include the 1 150 non-registered operators.

CPOs are crucial in the sector. The pest control industry has developed a points system which determines that every PCO must accumulate a required number of points over a three-year period prior to applying for the renewal of his/her registration. Various important courses, as identified by the industry in conjunction with the registrar (at DALRRD), will carry different weights (points). A PCO has to engage with a number of learning opportunities annually in order to accumulate the required points over the three-year registration period. These therefore become regulated top-up skills.

New Business Owners/Managers

Many new pest control businesses fail due to the owner's lack of business acumen. It is therefore important to train new business operators in related skills such as planning and scheduling, financial management and control and the management of labour/personnel.

Those that are currently operating without the necessary registration and are being tracked by DALRRD should be regarded as the priority group to receive training related to running a business. It is estimated that 1 150 people in the sub-sector need such training.

Workers

Although exempted from registration (as per Act 36), farmworkers and those participating in the Working for Water Project handle the same toxic substances and are exposed to (and expose others to) the same dangers as those who have to be formally recognised / registered as PCOs. It is essential to provide Working for Water Project participants and farmworkers with training, possibly through short skills programmes that focus on the use and management of pesticides and chemical stores.

3.3 EXTENT AND NATURE OF SUPPLY

Training in pest control and related subject matter is offered at universities, universities of technology and more specifically at agricultural colleges and private training providers. At the higher levels (universities, universities of technology and TVET colleges) pest control training forms part of broader qualifications. In the case of private providers accredited with AgriSETA, most offer the Unit Standard on Pest Control which is aimed at farmworkers – this is very valuable for reasons discussed above (where it is stated that farmworkers need to be exposed to appropriate training).

The vast majority of training aimed at pest control beyond the agricultural sector is driven by the employer body, namely the South African Pest Control Association (SAPCA) and the work done by the training provider PCITA, which is also accredited by AgriSETA. The key courses provided are:

- Practical field training
- DAFF P-registration, Act 36 of 1947
- Structural pest control
- Food safety (HACCP)
- Application of Termiticides
- Technician/Client service
- Fumigation

- Weed control
- Termites
- Full WDO and Termite Management Course (NQF4)

A second established training provider in the industry is the Pest Management Academy providing services to the industry and focusing on:

- e-Learning
- Various skills programmes such as bag, bulk and structural fumigation, weed control, structural pest management, termites
- FET Certificate in Pest Control Operations – NQF4 and NQF5
- Aerial application course – NQF4
- Field pest biologist – NQF5

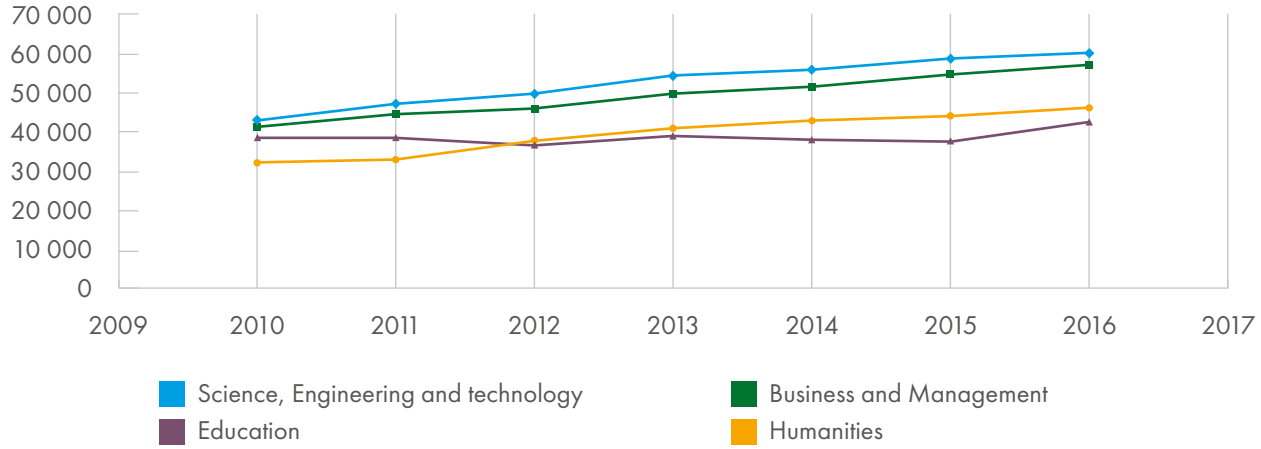
A third notable provider is the Grain Training Institute (GTI) focusing on combating contamination in grain and delivering training in this regard to silos and grain mills.

AgriSETA has accredited 1 529 training providers. Many of them are accredited to deliver on unit standards in the pest control environment.

HIGHER EDUCATION INSTITUTIONS

Agriculture is categorised under Science, Engineering and Technology. According to the Council on Higher Education (CHE), 2018, the number of students that graduate with a qualification in science, engineering and/or technology is low. Since 2010, the number of graduations in science, engineering and technology has increased an average of 5.5% per year. This has a negative effect on the skills pipeline that feeds into the agriculture sector and the pest control sub-sector.

FIGURE 8: PUBLIC UNIVERSITY GRADUATES BY MAJOR FIELD OF STUDY

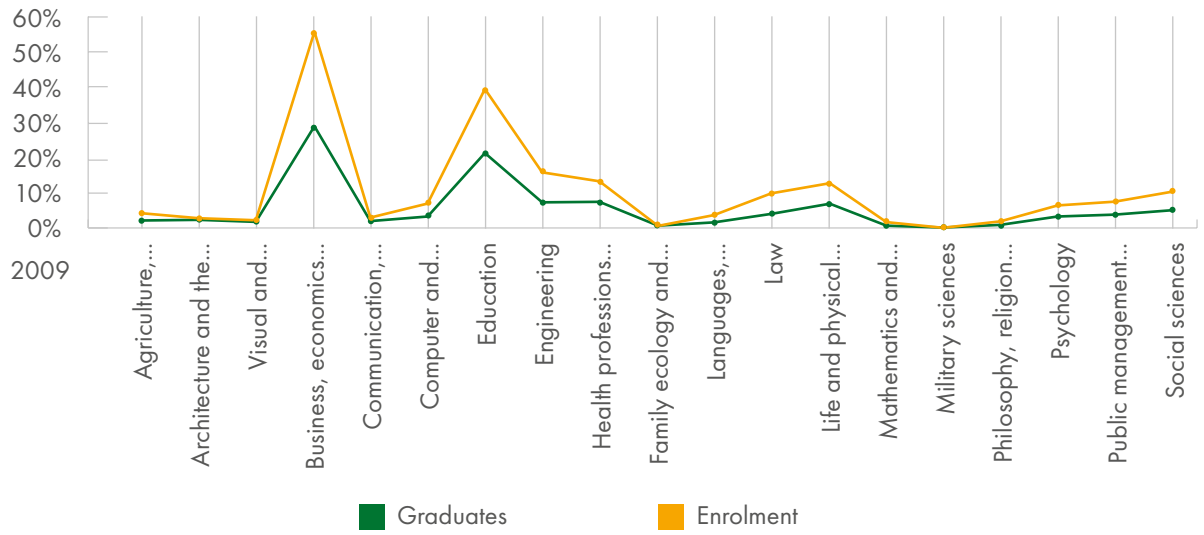


Source: CHET (2018)

The figure below shows public universities and technikons (universities of technology) by classification of educational subject matter category enrolment and graduates between 2000–2016. The figures give a clear indication of leaners who enrolled and graduated in agriculture, agricultural operations and related sciences in 2016.

Agriculture, agricultural operations and related sciences ranges among the lowest (at 2%) CESM for both enrolment and graduation. This has a direct impact in closing the scarce skills gaps in the sector. The below figures sure a clear indication of agriculture, agricultural operations and related sciences learners who enrolled and graduated in 2016.

FIGURE 9: NUMBER OF ENROLMENTS AND GRADUATES FROM PUBLIC UNIVERSITIES AND TECHNIKONS BY CLASSIFICATION OF EDUCATIONAL SUBJECT MATTER (CESM) 2000–2016



Source: DHET (HEMIS)

SKILLS SUPPLY THROUGH MANDATORY GRANTS

In addressing scarce and skills gaps needs in the sector, there are various skills development interventions that the AgriSETA and employers in the sector undertake. In 2019/20, employers that submitted training reports indicated that a total of 276 training interventions were attended by employees in the Pest Control sub-sector.

The table below outlines the training received in the sub-sector by occupational category and gender. The results show that the majority of people trained in the sub-sector were male (54%), while females (46%) make up the remaining proportion. The majority of employees that received training were under elementary occupations (32%); followed by plant, and machine operators and assemblers (28%). Employees that work as professionals, technicians and associate professionals and service and sales workers received the least training (1%) and employees in clerical support together with those in Skilled Agricultural, Forestry, Fishery, Craft and Related Trades received the second least training (14% and 18%, respectively).

TABLE 8: EMPLOYEES TRAINED BY OCCUPATIONAL CATEGORY AND GENDER

FINANCIAL YEAR	TOTAL MALE	TOTAL FEMALE	TOTAL	%
Managers	9	3	12	4%
Professionals	2	2	4	1%
Technicians and Associate Professionals	0	3	3	1%
Clerical Support Workers	38	2	40	14%
Service and Sales Workers	0	2	2	1%
Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers	33	17	50	18%
Plant and Machine Operators and Assemblers	57	21	78	28%
Elementary Occupations	9	78	87	32%
Grand Total	150	126	276	100%

Source: AgriSETA, ATR Data, 2019/20

3.4. SECTORAL PRIORITY OCCUPATIONS LIST (PIVOTAL)

The Grant Regulations (DHET, 2012) defines Sectoral Priority Occupations List (PIVOTAL) (professional, vocational, technical and academic learning) as "programmes that result in qualifications or part qualifications on the National Qualifications Framework". AgriSETA understands Sectoral Priority Occupations List (PIVOTAL) programmes to be programmes that respond to the supply of identified skills demands. Sectoral Priority Occupations List (PIVOTAL) programmes in the main respond to the scarce skills list.

Methods and interventions of arriving at the Sectoral Priority Occupations List (PIVOTAL) are as follows:

The AgriSETA's Sectoral Priority Occupations List (PIVOTAL) was derived through a number of measures. These included the list of scarce and skills gaps, the national list of occupations in high demand, analysis of performance information and interaction with key stakeholders. A series of surveys were sent out and telephonic interviews were conducted with major agriculture players, sub-sectors and industry representatives nationwide to determine, key skills gaps, future perceived skills gaps and to identify which programmes and models would best mitigate these gaps. The identification of the Sectoral Priority Occupations (PIVOTAL) list was preceded by the identification of scarce and skills gaps lists, which, in turn, was informed by a labour market demand analysis.

Interventions to implement the AgriSETA Sectoral Priority Occupations List (PIVOTAL) are informed by the status of supply such as the existence of registered qualifications, the adequacy of accredited providers and appropriate or relevant learning interventions to address the qualifications and skills in demand. The Sectoral Priority Occupations (PIVOTAL) list is ranked in order of priority as per the scarce skills identified, WSP 2019-2020 needs and the AgriSETA supportive interventions to develop these skills.

TABLE 9: THE AGRISETA 2019/20 Sectoral Priority Occupation (PIVOTAL) LIST

FINANCIAL YEAR	OCCUPATION CODE	OCCUPATION	SPECIALISATION/ ALTERNATIVE TITLE	INTERVENTION PLANNED BY THE SETA	NQF LEVEL	NQF ALIGNED	QUANTITY NEEDED	QUANTITY TO BE SUPPORTED BY SETA
2019/20	2017-821101	Crop Production Farm Worker / Assistant	Horticultural Farm, Practitioner Mixed Crop , Ornamental Horticultural Farm, Crop, Crop Farm Assistant	Learnerships	2	Yes	9 236	6 775
				Skills Programmes: National Certificate: Plant Production	1 and 2	Yes		
				AET programmes	NA	No		
2019/20	2017-832904	Food and Beverage Factory Worker	Valve Controller, Silo Worker, Perishable Produce Packhouse Worker, Grain Dryer Attendant, Winery Worker, Line Attendant	Learnerships	1, 2 and 3	Yes	6 025	2 900
2019/20	2017-862916	Farm Maintenance Worker	No Specialisation/ Alternative Title	Learnership and Skills programmes	1 and 2	Yes	5 676	2 995*
				AET programmes	NA	No		875
2019/20	2017-131101	Agricultural Farm manager	Horticultural Farm Manager, Livestock Farm Manager, Vegetable Farm Manager, Mixed Crop and Livestock Farm Manager, Ornamental Horticultural Farm Manager, Mixed Crop Farm Manager, Dairy Farm Manager, Arboriculture Farm Manager, Field Vegetable Farm Manager, Agronomy Farm Manager, Sugar Farm Manager	Internships, Bursaries and Learnerships: National Certificate: Animal Production, National Diploma: Crop Production, National Diploma: Agriculture	4 and 7	Yes	5 600	900
2019/20	2017-821104	Harvester / Picker	Picker Quality Controller, Grape Picker, Nut Picker, Fruit Picker Haymaker, Hops or Tea Picker, Flower Buncher or Picker, Vegetable Picker, Mushroom Harvester / Picker	Skills programme	1, 2 and 3	Yes	3 748	1 445

FINANCIAL YEAR	OCCUPATION CODE	OCCUPATION	SPECIALISATION/ ALTERNATIVE TITLE	INTERVENTION PLANNED BY THE SETA	NQF LEVEL	NQF ALIGNED	QUANTITY NEEDED	QUANTITY TO BE SUPPORTED BY SETA
2019/20	2017-821301	Mixed Crop and Livestock Farm Worker / Assistant	General Farm Worker	Learnerships	1,2 and 3	Yes	3 119	2 995*
				Skills programmes				
				AET programmes	NA	No		435
2019/20	2017-213202	Agricultural Scientist	Agronomists, Plant Breeders, Plant Pathologists, Animal Scientists, Plant Scientist, Soil, and Pasture Scientists	Graduate and Post Graduate Bursaries and Internships; BSc Agriculture; BSc Plant Breeding; BTech: Crop Production; BTech: Horticulture; BSc Crop Science; MSc Animal Health	6 to 8	Yes	1 759	980
2019/20	2017-611202	Horticultural Farmer	Horticultural Production Supervisor, Horticultural Farm Foreman	Learnerships	1 and 2	Yes	1 534	2 995*
				Skills programme				
2019/20	2017-671202	Millwright	Winder Technician, Electromechanician, Machine Tool Millwright, Ground Electromechanician, Millwright (Electromechanician), Printers Mechanic	Artisan	3	Yes	1 470	233
2019/20	2017-122101	Sales and Marketing Manager	Key Account Manager, Business Development Manager, Business Support Manager	Graduate and Post Graduate Bursaries and Internships	6 to 8	Yes	1 447	1 445

**Note that the 2995 covers exclusively for Learnerships and Skills Programmes*

3.5. CONCLUSION

Although it is generally not difficult to fill vacant posts in the pest control sub-sector, the quality of the skills of new recruits is frequently not up to standard. This therefore implies that there is a need for topping up existing skills and so enable people to perform better.

To close the skills gap, the sub-sector needs training interventions in business acumen (for owners of pest control enterprises); use and management of pesticides, storage of pesticides, safety of pesticides, environmental issues and new products on the market (for pest control operators, farmworkers and workers on the Working for Water Project). The sub-sector also needs to create a pool of professional mentors that can be deployed nationwide.

It is important to point out that when trying to measure demand against supply, attaining a qualification and the supply of skills, are not synonymous. Indeed, a numeric comparison of skills supplied and demanded would overlook the essential component of workplace experience and broader contextual factors that influence the sector as a whole. We have seen that the overarching issues framing skills supply and demand draw attention to challenges with South Africa's rural/urban divide and adequately servicing the needs of the rural sector.

CHAPTER 4

PARTNERSHIPS

4.1. INTRODUCTION

Good partnerships are essential for the pest control sub-sector to achieve the relevant and targeted skills provision that promotes economic sustainability and well-being. This chapter highlights the partnerships that exist among the AgriSETA, the pest control sub-sector and its stakeholders and role-players. Four key partnerships were identified; two are existing partnerships and two are new or emerging partnerships.

4.2 EXISTING PARTNERSHIPS

DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT (DALRRD)

The DALRRD [which was previously known as the Department of Agriculture, Fisheries and Forestry (DAFF)] is a key partner of the Pest Control sub-sector. The registrar responsible for the registration of pest control operators (PCOs) is situated within DALRRD. Industry players work closely, through SAPCA, with the department to ensure that the registration requirements remain aligned to the changing needs of the sub-sector.

Furthermore, the department and the sub-sector are working together on strategies to grow the possibilities of self-regulation. In this regard there is closer collaboration to legitimise all participants in the sub-sector.

The department is also aware and supportive of SAPCA's initiative to expand e-learning as a platform to reach out to more of its members and in this manner contribute to professionalising the industry. These training programmes are not exclusive and are not limited to members; they are open to all persons registered under Act 36 of 1947.

AGRISETA

A strong relationship exists between pest control stakeholders, industry players and AgriSETA. Pest control is one of the 11 formally recognised sub-sectors in AgriSETA and the Pest Control Sub-sector Skill Committee is an active participant in the strategic planning of the SETA. The SETA funds skills development and training programmes as well as provides mandatory and discretionary grants to levy paying members and those who submit their WSPs and ATRs. The SETA also funds many pest control skills programmes in the broader agricultural sector.

4.3 EMERGING PARTNERSHIPS

DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES (DEFF)

Though there is no formal partnership between the pest control sub-sector and Department of Environment, Forestry and Fisheries (DEFF), it is the intention of the sub-sector to engage with the department. The sub-sector wishes to contribute to the proper training of young people that are recruited for DEFF's Working for Water Project. The project aims to eradicate alien plants in rivers and dams and the department recruited many young people to work in the project. There is a possibility that some of those young people can migrate into the pest control industry.

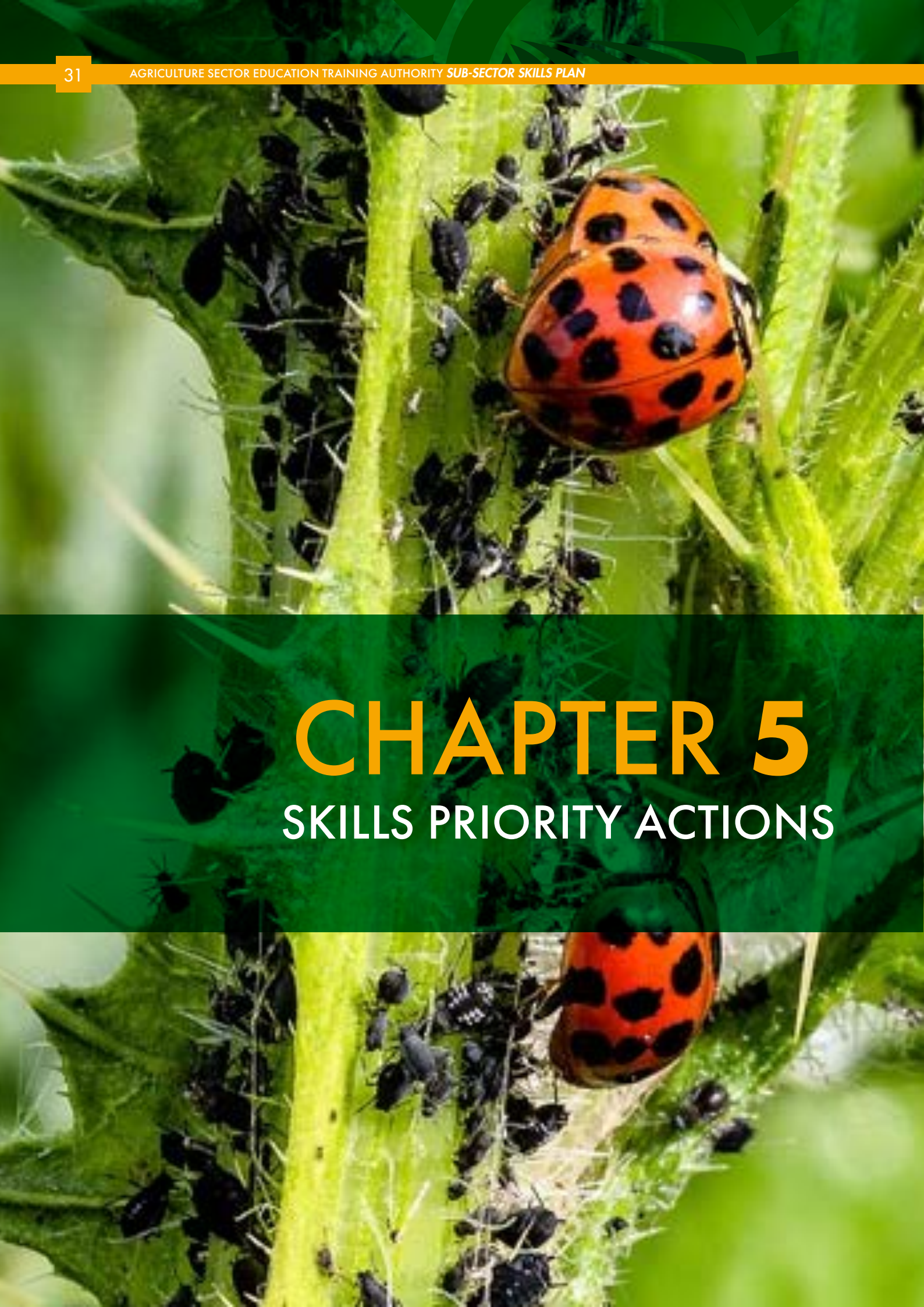
AGRICULTURAL EMPLOYER BODIES

There is no formal partnership with agricultural employer body/ies. AgriSA, TLUSA, NAFU and AVCASA are presently in discussions about collaborating to contribute to the training of farmworkers working with toxic substances. A formal arrangement could contribute professionalising the agricultural sector and the Pest Control sub-sector as well as assist in meeting GAP requirements.

4.4 CONCLUSION

The pest control sub-sector has an important role to play in the South African economy – even though it is relatively small, it contributes to a healthy environment and the eradication of pest and disease in the production of food, in farms, households, factories, schools, hospitals and offices, to mention but a few. Pest control impacts directly on the environment, and on human and animal life.

The sub-sector cannot operate in isolation. Over time, it has created key partnerships that are beneficial to all involved. During the past year, two emerging partnerships were identified (with DEFF and agricultural employer bodies) and will be pursued in the immediate future.



CHAPTER 5
SKILLS PRIORITY ACTIONS

5.1. INTRODUCTION

This chapter aims to synthesise the findings of the previous chapters and establish a set of skills priority actions for the sub-sector. The intention of recommended skills priority actions is that they articulate the micro concerns of the pest control sub-sector.

These recommendations are founded on national policy and key skills issues (Chapter 2), as well as the skills concerns identified by employers and training providers in terms of their skills needs (Chapter 3). This chapter is not a strategic or operational plan, but rather serves to identify priorities that should be taken forward and further developed in the AgriSETA Strategic Plan and Annual Performance Plan and to reflect the needs of the Pest Control sub-sector in those documents.

5.2 KEY FINDINGS FROM PREVIOUS CHAPTERS

Chapter 1 illustrated that the pest control industry is not treated as a defined economic sector by any source such as Stats SA which makes it difficult to obtain economic and labour data.

Pest Control is a small economic sub-sector, spread across the country. It consists mainly of small enterprises and is regulated by Act 36 of 1947, which determines pest control operators (PCOs) must be registered and their registration needs to be renewed every three years.

Chapter 2 illustrated that while the formal part of the sub-sector is regulated, many people who work in pest control – such as those on the Working for Water Project and farmworkers who work on a daily basis with highly toxic substances – are excluded from the legal registration requirement. This has to be addressed.

The sub-sector is not complex and the key occupation is that of a pest control operator (PCO). Other important occupations are that of general workers (the assistant to the PCO who more often than not, progresses to a PCO), sales and marketing people, and small business managers.

Chapter 3 shows that there are no real skill shortages in the sub-sector nor hard-to-fill vacancies (HTFVs). The real issue is that authorities need to ensure that those working with substances (as described in Chapter 2), are properly trained and certificated to do so. Similarly, there is a need to develop business acumen. In the case of pest control the PIVOTAL programmes will therefore have to focus on:

- pest control operators;
- pest management officers;
- general workers; and
- the development of small business managers/owners.

The industry has partnerships with AgriSETA (mainly on skills development funding) and DAFF (focusing on the regulation of the industry). There is a need to develop partnerships with the Department of Environment, Forestry and Fisheries (DEFF) (to formalise the training of those involved in the Working for Water Project) and agricultural employer bodies (to start a process to draw farmworkers into the fold).

5.3 RECOMMENDED ACTIONS

The priority skills and key priority actions needed in the Pest Control sub-sector are summarised below:

(1) Business Acumen

It is proposed that the sub-sector work closely with AgriSETA and interrogate the NCV 2 and NCV 4 curricula. If relevant, these qualifications must be tailored to meet the needs of pest control and become a foundation programme to develop new entrants to the sub-sector (covering aspects such as identifying and starting a new business; plus basic business planning such as setting targets, resource planning, financial and operational plans).

Consideration should be given to the need to implement the full NCV programme or only elements thereof as a part qualification.

Develop tailored short skills programmes focusing on financial planning, production planning, etc. These are foreseen as one to three day programmes.

(2) Technical Skills

Technical skills programmes are largely in place (see PCITA programmes). However, efforts must be made to engage with those who operate illegally, those who work in the Working for Water Project, the thousands of farmworkers who engage on a daily basis with pesticides, as well as those who manage chemical stores and who are involved in the transportation and application processes. Act 36 of 1947 is quite clear that all persons that apply herbicide, pesticide or any agricultural remedy must be registered. They must complete a relevant training course and obtain a qualification before they can register. Chemicals can have a disastrous effect on the lives of people and the environment if not managed correctly.

(3) Mentoring Skills

It is necessary to develop a pool of mentors who can assist PCOs in their development as professional operators and to assist them in creating sustainable businesses. There is a practical element that has to be addressed during the training program to finally obtain the qualification. Pest control operators (PCOs) need to do on average six months' workplace practical under a registered operator/officer.

(4) CPD

New product knowledge and skills, through continuing professional development (CPD) short programmes that focus on new product information, must be prioritised. CPD will ensure that existing operators are trained to use and apply new products correctly. The fundamental intent of CPD is to implement continuous training programmes that will educate and uplift the pest control operator in all aspects of his work. The priority actions for the AgriSETA are summarised in Table 10.

TABLE 10: PROPOSED PRIORITY ACTIONS

Priority Action	Reason	Intervention	PESTEL/SWOT KEY ISSUES
Practical training at NQF 2, 3, 4 & 5	The need to gain registration for those working with pesticides.	Funding for internships, learnerships, graduate placements and short courses.	To create alignment with current legislation (Act 36 of 1947).
CPD	Regular training to meet requirements of re-licensing.	Short courses on CPD matters identified from time to time by SSC.	Alignment with legislation and moving towards the Green Economy.
Limited Applicators (Working for Water)	Applicators need to be better skilled and need to meet legislative requirements.	Learnerships, Short courses focusing on understanding chemicals.	Alignment to legislation for safety and environmental reasons.
Engagement with the formal agricultural sector	Start formalising training of farmworkers.	Short courses on pest control offered by duly registered pest control training institutions.	Start aligning farmworkers to legislative requirements, food safety, GAP and environmental requirements.

5.4. CONCLUSION

The Pest Control sub-sector needs to be treated as a defined economic sector by the authorities and to be given the necessary attention that will enable it to fully contribute to the economic growth of South Africa. Tailor-made developmental programmes and short courses should be developed and registered to assist small-scale farmers and business people to run their enterprises effectively.

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AgriSETA House
529 Belvedere Road
Arcadia
0083

+ 27 (0) 12 301 5600

+ 27 (0) 12 325 1677 / 325 1624

info@agriseta.co.za

www.agriseta.co.za

AgriSETA