FIBRE

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
AGRISETA	Agricultural Sector Education and Training Authority
ATI	Agricultural Training Institute
ATR	Annual Training Report
BCI	Better Cotton Initiative
BFAP	Bureau for Food and Agricultural Policy
CPD	Continuous Professional Development
*DAFF [DALRRD]	*Department of Agriculture, Fisheries and Forestry [changed to Department of Agriculture, Land Reform and Rural Development 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]
*DRDLR [DALRRD]	*Department of Rural Development and Land Reform [it no longer exists, falls under the Department of Agriculture, Land Reform and Rural Development from June 2019]
*dti [dtic]	*Department of Trade and Industry [changed to Department of Trade, Industry and Competition in June 2019]
GDP	Gross Domestic Product
HEMIS	Higher Education Management Information System
HTFV	Hard-To-Fill Vacancies

ICAC	International Cotton Advisory Committee
IDP	Integrated Development Plan
KZN	KwaZulu-Natal
MAFISA	Micro Agricultural Financial Institution of South Africa
NAFU	National African Farmers Union
NSDP	National Skills Development Plan
NDP	National Development Plan
NGP	New Growth Path
NQF	National Qualifications Framework
NVC	New Venture Creation
NWGA	National Wool Growers Association
SARS	South African Revenue Service
SDL	Skills Development Levy
SIC	Standard Industrial Classification
SSP	Sector Skills Plan
Stats SA	Statistics South Africa
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

The Fibre sub-sector is comprised of three major sections;

- **Wool** – includes farming with wool sheep (mainly Merino sheep), the annual shearing of the sheep, classing of wool, baling and presenting the wool at the auction floor in Port Elizabeth.
- **Mohair** – the total mohair process consists of the farming with Angora goats, shorn twice a year, classing into various lengths, fibre diameter and quality types, scouring (washing to remove excess dirt and oils), carding (grouping it into uniform lengths), combing (removal of vegetable matter and irregular sized fibres).
- **Cotton** – in the context of AgriSETA's demarcation, cotton consists of two industry segments: cotton farming and cotton ginning.

The South African mohair industry is the largest in the world and it accounted for 54% of the total global production in 2018 (Mohair SA, 2019). Most of the mohair produced in South Africa is exported. Similarly, most of the annual wool clip and cotton lint is also exported.

It is expected that 244,543 lint cotton bales will be manufactured in South Africa in 2019/20. This is very low compared to global manufacturing, which is estimated to be 26.9 million tons (CottonSA, 2019). Although this quantity is low, it has risen by more than 30% over the last season and more or less unchanged from the last estimate. Dry soil and irrigation hectares have risen by 45% and 22%, respectively, over the previous year, mainly due to more favourable cotton yields compared to competitive crops, but also due to renewed interest in cotton production. While Limpopo is the largest cotton producing province in South Africa, wool and mohair is to be found in the Eastern Cape, Free State, and Western Cape.

All three components of the Fibre sub-sector are active in the development of small-scale farmers. Especially in wool and cotton production, small scale and communal farmers are making a real impact on total production and therefore it is found that employers' associations in all three components are very active in the support and expansion of their emerging farmer population.

Four factors stand out as key drivers of change:

- Future growth of small-scale farmers will happen and is key to the growth of the three sectors;
- Extension advisors will have a major influence on the success of emergent farmers and need to be established accordingly;
- Policy uncertainty impacts on decision-making on the ground and leave emergent farmers stranded when decisions of a year ago with regards to long term support is simply ignored for political reasons; and
- The green economy is important as it impacts on environmentally sustainable farming practices, but also on emotional matters such as the handling of predators.

Seven skills implications were identified, namely:

1. Develop small-scale farmers' business and entrepreneurial skills;
2. Train small-scale farmers in better understanding of animal breeding and plant health practices;
3. Technical matters such as pre-grading handling of cotton, proper classing of wool and mohair which will impact positively on prices attained at markets;
4. Mentorship cannot be the task of commodity organisations alone – DAFF and the provincial departments of agriculture need to devise a plan on how to capacitate extension officers to make a productive contribution and how to keep up to date with development in the industry. As the cotton sector mechanises, the need for mentors will increase;
5. Predation – Skills in how to manage this problem in a humane and acceptable manner;
6. Knowledge with regards to natural resources and economic management; and
7. Management of disasters (floods, droughts and wild fires).

From the above specific priority skills were identified and will become the focus of AgriSETA for this sub-sector. The priority skills in the Fibre sub-sector are:

- **Business acumen** – It is firstly proposed that the sector work closely with AgriSETA and interrogate the NVC 2 and NVC 4 curricula. If relevant, these qualifications

must be tailored to meet the needs of the Fibre industry and become a foundation programme to develop new entrants covering aspects such as identifying and starting a new business, basic business plan such as setting targets, resource planning, financial and operational plans.

- **Animal Health Technicians** – Due to the severe shortage, consideration should be given of how to expand the supply beyond the Onderstepoort Campus (UP Faculty of Veterinary Science) and Tsolo Agricultural Institute.

- **Professional Predator Control Officers** – This needs to be recognised as a new occupation and the AgriSETA should engage with it accordingly (development of qualifications and learning material, focused funding).

- **Agricultural extension officers** – The relatively new qualifications for agricultural extension officers should be implemented more widely and should be a core component of their CPD.

- **Commercial farmers** – They need to be exposed to CPD in matters such as disaster management, natural resource management and understanding macro and micro economics.

- **Labour market information** – The sub-sector lacks information due to the fact that many of the sector's members are registered under incorrect SIC codes and resort under other sub-sectors.

RESEARCH PROCESS AND METHODS

AgriSETA carried out various research projects to produce the Fibre 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 Fibre 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 synthesis the key economic, policy and training issues affecting the Fibre sub-sector, and to identify key skills issues.

SCARCE AND PIVOTAL LIST FORMULATION

The scarce skills, skills gaps and pivotal skills 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 – 1 March 2019), interviews and data collection.

SUMMARY OF KEY FINDINGS

The Fibre sub-sector is not large, and it has only a few employers registered with the AgriSETA. Because wool and mohair farmers farm with animals, most of them have registered with the Red Meat sub-sector and similarly cotton farmers registered with the Horticulture sub-sector.

The sub-sector is important as cotton, wool and mohair are exported to the EU and China. The local mohair industry is the largest in the world and accounts for more than 50% of global production.

The fibre sub-sector has good growth potential and prospects for earning more foreign revenue. Some of the priority skills and key priority actions needed in the Fibre sub-sector include:

- Developing tailor-made programmes that stimulate business acumen/entrepreneurship;
- Training more animal health technicians and nurses; and
- Modernising qualifications to improve the ability of extension officers to contribute to the well-being and growth of the sub-sector (especially of small-scale and communal farmers).

As many Fibre entities are registered under incorrect SIC codes, the AgriSETA needs to assess the extent of the problem and take the necessary steps to rectify it.

The Fibre sub-sector has to ensure that it rebuilds partnerships with agricultural training institutions (ATIs) – especially given the importance of developing small-scale farmers in mohair, wool and cotton.

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CHAPTER 1
SECTOR PROFILE

1.1. INTRODUCTION

Chapter 1 of this report provides an overview of the agricultural sector, paying particular attention to the Fibre sub-sector in South Africa. The first section looks at the scope of the Fibre sub-sector's coverage. The second section outlines AgriSETA stakeholders and key role-players in the Fibre sector. The third section looks at the economic performance of the overall agricultural sector, zooming into the contribution of Fibre to the South African economy.

The fourth section explores the employer profile, based on research (WSP/ATRs could not be used). The last section provides a labour market profile where the number and demographics of people employed in the sector is explored. Essentially, the chapter sets the scene for the skills issues that are delved into in the 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 Fibre sub-sector is classified into a single economic activity and is mainly engaged with primary activities (farming with wool sheep, Angora goats and cotton) and secondary activities (such as baling, grading and sales of wool and mohair). The table below outlines the formal demarcation of the Fibre sub-sector.

Table 2: ACTIVITIES WITHIN THE FIBRE SUB-SECTOR BY STANDARD INDUSTRIAL CLASSIFICATION CODE

SUB-SECTOR	SIC CODE	SIC Description
Fibre	30118	Grading, ginning and packing of wool and cotton raw material

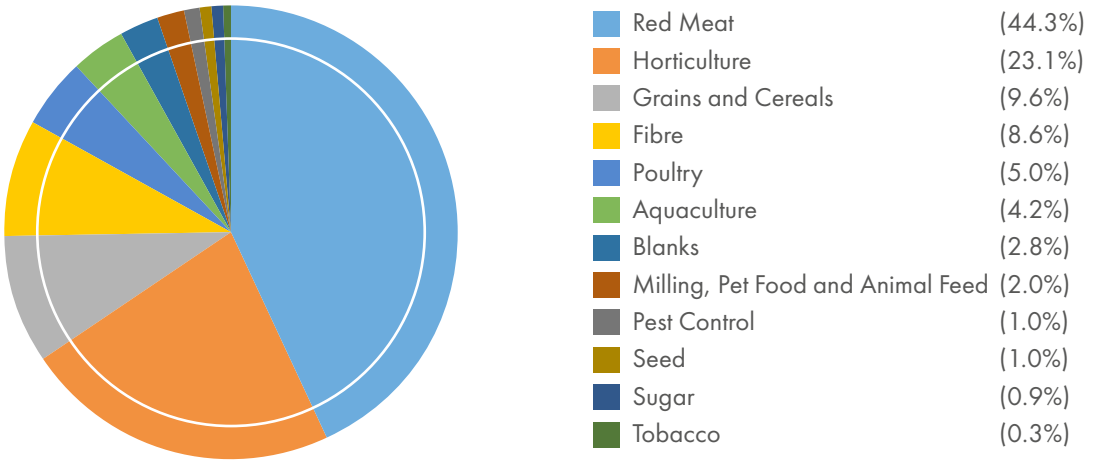
Source: AgriSETA, 2019/20

The Fibre sub-sector is comprised of three major sections

- **Wool** – includes farming with wool sheep (mainly Merino sheep), the annual shearing of the sheep, classing of wool, baling and presenting the wool at the auction floor in Port Elizabeth.
- **Mohair** – the total mohair process consists of the farming with Angora goats, shorn twice a year, classing into various lengths, fibre diameter and quality types, scouring (washing to remove excess dirt and oils), carding (grouping it into uniform lengths), combing (removal of vegetable matter and irregular sized fibres).
- **Cotton** – in the context of AgriSETA's demarcation, cotton consists of two industry segments: cotton farming and cotton ginning.

Overall, the agricultural sector consists of 11 sub-sectors, each organised into a sub-sector committee tasked to represent their industry's interest to AgriSETA. These are: 1) Red Meat; 2) Horticulture; 3) Fibre; 4) Grain and Cereals; 5) Aquaculture; 6) Pest Control; 7) Milling, Pet Food, and Animal Feeds; 8) Poultry; 9) Seed; 10) Sugar; and 11) Tobacco. The Fibre sub-sector constitutes 8.6% of the overall number of levy paying entities to the AgriSETA. The pie chart outlines the relative size of membership number by sub-sectors, as captured in the AgriSETA member database of 2019/20.

Figure 1: DISTRIBUTION OF AGRICULTURAL ENTITIES BY SUB-SECTOR



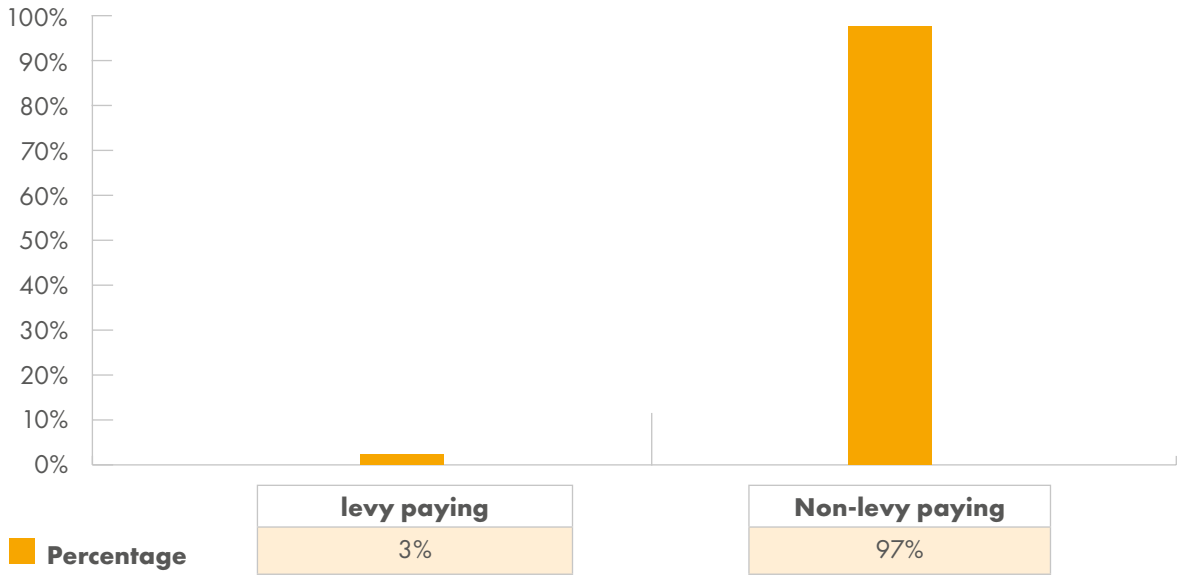
Source: AgriSETA Employer Data, 2019/20

REVENUE FROM SKILLS DEVELOPMENT LEVIES

In 2019/20, the value of SDL paid by the Fibre sub-sector was R1 935 568. It should be noted that most of the primary activities, the actual farming, is excluded from this figure and is included under Red Meat as are many cotton farming activities which are included under horticulture. Both can also be traced under mixed farming standard industrial classification (SIC) codes.

In 2019/20, there was a total of 2 192 Fibre sub-sector entities on the AgriSETA employer database, contributing 8.6% of total entities in the agricultural sector. Of these 2 192 entities, only 3% contribute to the skills development.

FIGURE 2: SKILLS DEVELOPMENT LEVIES



Source: AgriSETA Employer Database, 2019/20

1.3. KEY ROLE-PLAYERS

There are a number of 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. Note that while comprehensive, this list is not exhaustive.

Table 3: 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

Strategic contribution	Department or organisation	Relevance to agricultural skills development
Planning	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.
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)	Production loans to smallholder operators.
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 considering the Fibre sub-sector.

Table 4: KEY FIBRE ROLE-PLAYERS

Strategic contribution	Department or organisation	Relevance to agricultural skills development
Lobbying, research and marketing	NWGA, Mohair SA, Cotton SA & OVK	All three elements of the sector (wool, mohair and cotton) are well organised into industry associations that engage with other bodies and export markets on behalf of its members
Small scale farmer development	DAFF [changed to Department of Environment, Forestry and Fisheries (DEFF) in June 2019]	DAFF is assisting with predator control programmes Create an enabling environment for small-scale cotton farmers to expand
	DRDLR [changed to DALRRD – Department of Agriculture, Land Reform and Rural Development in June 2019]	In the case of wool, DRDLR is instrumental in the improvement of stock via the supply of quality breeding rams and establishment of rural searing sheds An additional 3 000 ha dry land is required for the current population of small-scale farmers to be successful
Research	ARC	Research into entomology, cultivar selection in cotton

1.4. ECONOMIC PERFORMANCE

OVERVIEW

The gross domestic product (GDP) forecast for South African's total annual growth rate increased by 1% from 2018 to 2019 (OECD, 2019). According to Stats SA (2019), the agriculture, forestry and fishing industry has declined by 29.2%. Furthermore, the contribution by sector for the second quarter of 2018 is shown in Figure 3 which contributed -0.8 of a percentage point to GDP. The contraction was due to the drop in the production of field crops and horticultural products. Notwithstanding the relatively small share of the total GDP, primary agriculture is an important sector in the South African economy; R71198.35 million in the first quarter of 2019 from R73759.84 million in the fourth quarter of 2018 (Trading economics, 2018/19). In addition, the sector plays an important role in job creation, especially in the more rural parts of the country.

The Fibre sub-sector, is important to the South African agricultural sector. The mohair industry is the largest in the world and it accounted for 54% of the total global production in 2018 (Mohair SA, 2019). All mohair produced in South Africa is exported. Similarly, most of the annual wool clip and cotton lint is also exported.

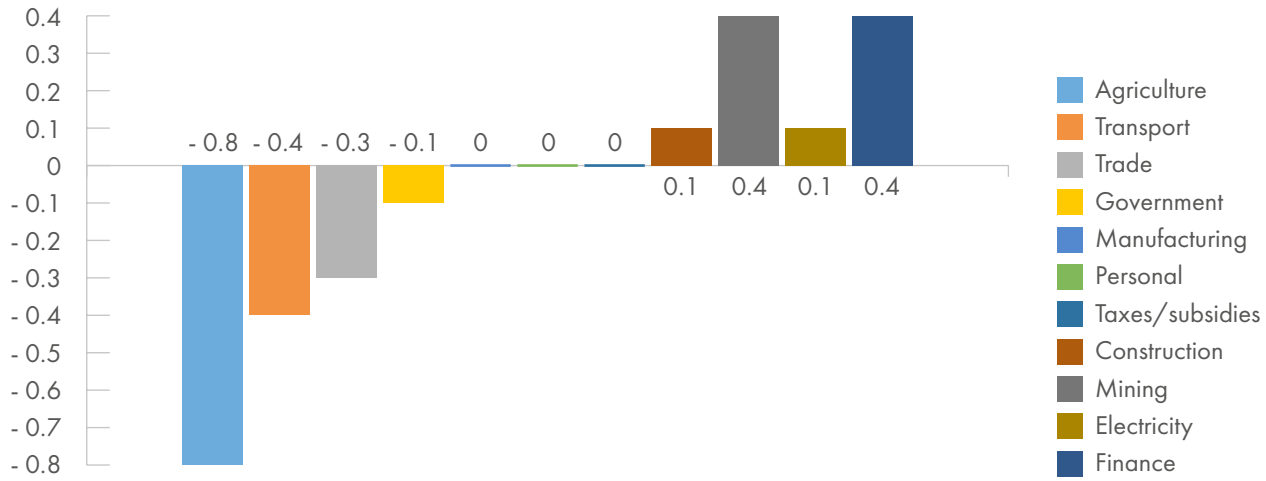
Two decades ago, South Africa produced 140 million tons of wool annually, while in the last year around 50 000 tons was produced and valued at approximately R5 billion. The decline in wool production is mainly due to stock theft, predation, droughts and mining activities. More than 90% of the wool clip is exported to China, India and Europe, which makes the wool industry an important earner for foreign exchange.

International Cotton Advisory Committee (ICAC) estimate that global cotton consumption for 2019/20 will increase by 5% to 26.9 million tons. Although cotton consumption

projection for 2019/20 points to a possible record consumption, it is only 1% more than the previous record consumption. The weakening world economic environment and slower economic expansion as well as competition from global cotton trade is expected to grow by 2% in 2019/20 to 9.5 million tons with Bangladesh and Vietnam being responsible for most of the expansion in cotton trade.

It is expected that 244,543 lint bales will be manufactured in South Africa in 2019/20 (CottonSA, 2019). Although this quantity is low, it has risen by more than 30% over the last season and more or less unchanged from the last estimate. Dry soil and irrigation hectares have risen by 45% and 22% respectively, over the previous year, mainly due tomore favourable cotton yields compared to competitive crops, but also due to renewed interest in cotton production.

Figure 3: CONTRIBUTION TO GDP BY SECTOR, Q2 2018



Source: Stats SA, 2018, Gross Domestic Product

ECONOMIC OUTLOOK OF THE SUB-SECTOR

Mohair prices are increasing at a healthy rate. Starting from R78/kg in 2006, it grew to R215/kg in 2015, to R234/kg today above R270 /kg. The demand is strong, as almost 100% of the clip offered at the regular auctions in Port Elizabeth is sold. Most mohair is exported to China (35%) followed by Italy (25%), the UK (12%), Taiwan (10%) and Japan at 5%. According to the BKB report (2019), the winter season of 2019 provided 149 858 kg of mohair. Although, the quality of mohair was outstanding, the market reduced by 10%. The closer the youthful micron and the adult mohair fell the most. This decrease in market was due to the trade war between USA and China. The average market indicator compared to the corresponding sale of the 2018 winter season closed 10% cheaper trading at R222.20/kg. The average market price of kid mohair increased with 1.0% at R415/kg while the young goat mohair declined with 13% at R261.74/kg. The average price for fine adult mohair decreased with 14% at R211.03/kg while the strong adult mohair decreased by 11% at R193.67/kg.

The International Cotton Advisory Committee's (ICAC) first price projection for 2018/19 season, indicates an average outlook index of approximately R23/kg). The price forecast for 2018/19 represents a small improvement from the ICACs' latest average cotton price projection for this season (Cotton SA, 2019).

By the end of the 2019/20 season, the market indicators for wool increased by 10.8% to R163.6/kg clean (BKB 2019). Further, Cape wools SA (2019) indicated that prices were at healthy levels throughout the season, with the Cape Wools' Merino indicator reaching a seasonal high of R253,82/

kg (clean). There is usually significant price volatility during and between auctions. The cost of wool is determined by a complicated set of factors, including the rate of the international economy on a specified day, exchange rate fluctuations, quantities offered for sale on auction, the specific demand for different types of wool at different times, the extent and timing of the contract obligations of local buyers to deliver to customers and the economic conditions prevailing in the wool-consuming countries (NDA, 2019). Currently wool producers are enjoying an exceptional upswing in the wool market. The current high demand and low supply, coupled with the weak rand, renders the market advantageous for wool producers. According to international marketing projections, local producers can increase production to 75 million kilogram of wool per annum.

Approximately 90% of local wool is exported and 10% used for wool products manufactured here (Agriorbit, 2019). Wool and mohair therefore increasingly needs to comply with international sustainable production standards that relate to animal welfare, the environment and socio-economic factors. This places an additional responsibility on these industries to ensure accredited skills development programs in support of sustainable production practices and standards.

The Better Cotton Initiative (BCI, 2019) was launched to encourage better norms in cotton farming and practice across 21 nations. BCI encourages farmers to develop greater knowledge and understanding of ways to minimize the damaging effect of crop protection. It also helps farmers to promote water stewardship, care for the health of the soil, biodiversity and use land responsibly, care and preservation of fibre quality. BCI also promote the fundamental principles and rights at work on employment and income opportunities. Further, it supports farmers in operating a management system that includes the framework of policies, processes and procedures to ensuring they can fulfil all the tasks required to meet BCI principles and criteria.

It is becoming more common knowledge that cotton is a very good crop rotation product as it uses different chemicals and therefore "breaking" the chemical chain that is forming when replanting the same crop every year.

As the cotton industry stabilises and grows, commercial banks are becoming involved again with the provision of capital. The fact that in 2016 alone more that R100 millions of cotton equipment was bought is evidence of this. The Land Bank should similarly start funding small scale farmers, especially as there is a need for a ginnery owned by small scale farmers.

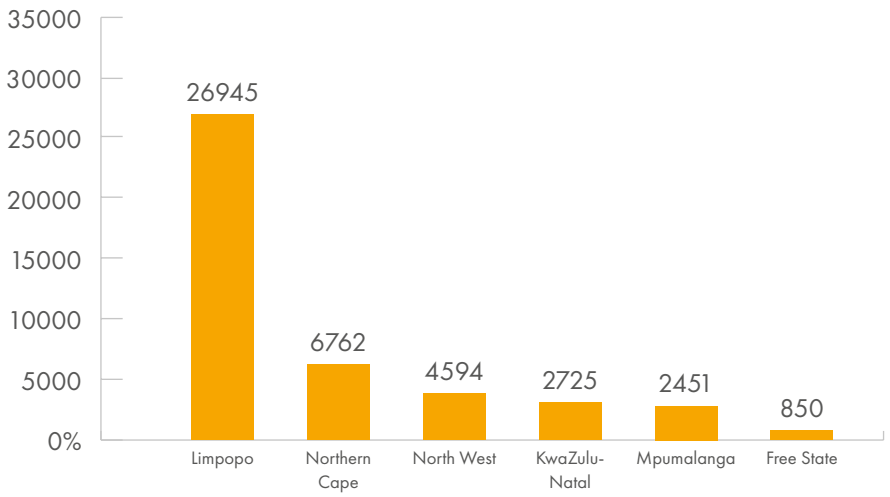
In 2019, the wool industry faced significant challenge, as the Food and Mouth Disease (FMD) outbreak in the free zone halted South Africa's wool exports. During the first four months of 2019, export volumes reduced by 46% compared to the same period in 2018. Challenges in relation to stock theft and predation also contribute to lover volumes of wool production (BFAP, 2019)

1.5 EMPLOYER PROFILE

According to AgriSETA employer database there are 2 192 registered Fibre industry employers in South Africa. The vast majority of local cotton is produced in Limpopo, followed by the Northern Cape and North West. Three provinces such as the Western Cape, Eastern Cape and Gauteng are not known to produce any meaningful volumes of cotton.

Rather than using WSP/ATR information, statistics from industry employer bodies were used as a basis for calculation. In terms of hectares planted, the table below indicates that most cotton is produced in Limpopo, followed by the Northern Cape.

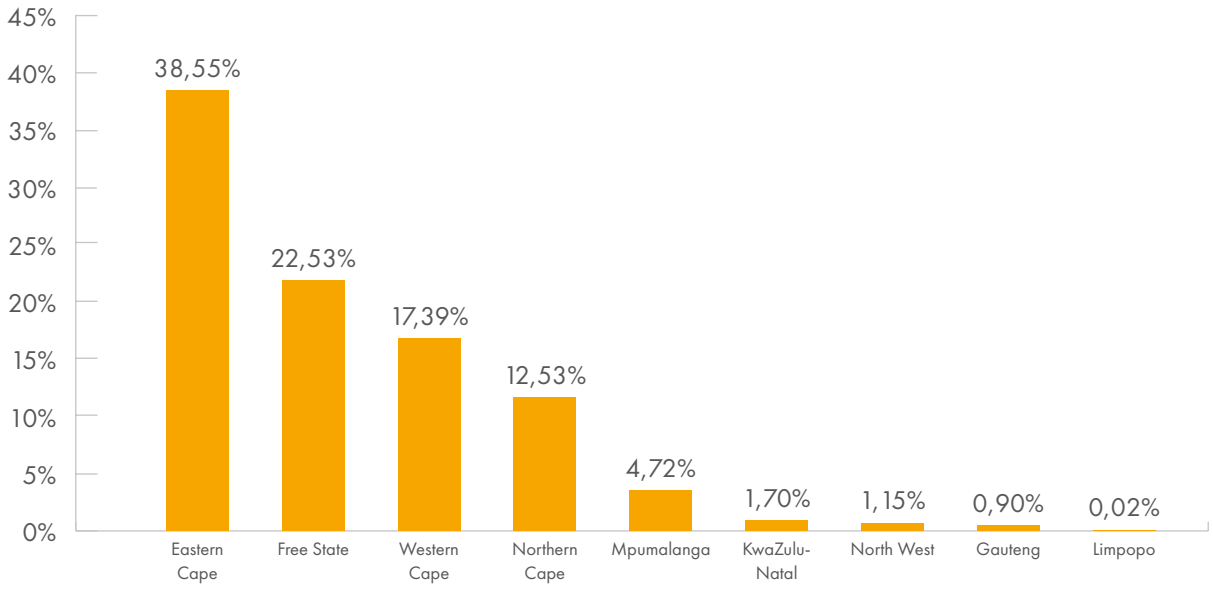
Figure 4: PROVINCIAL DISTRIBUTION OF COTTON ENTITIES (using hectares under cultivation as a proxy



Cotton SA, 2019/20

The table below shows that the Eastern Cape is the largest producer of wool (38.55 %), followed by the Free State and Western Cape (22.53% and 17.39%), respectively. This is understandable since more than 30% of all South Africa's sheep are to be found in these provinces. KwaZulu-Natal, North West, Gauteng and Limpopo contribute less than 5% of wool produced throughout the country.

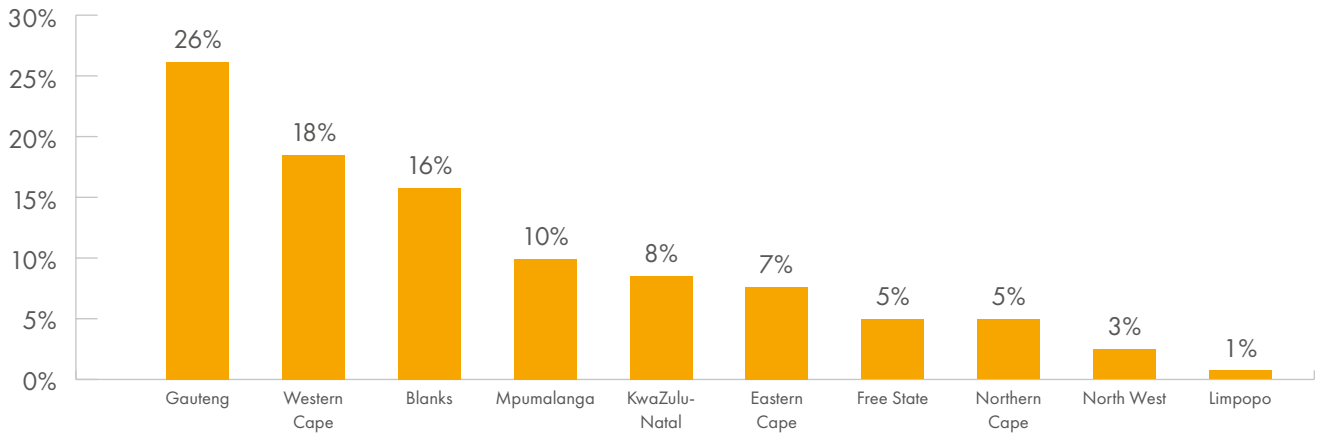
Figure 5: WOOL PRODUCTION PER PROVINCES



Source: Cape Wools SA, 2019

According to AgriSETA employer database 2019/20 majority of Fibre entities are found in Gauteng (26%) and Western Cape (18%). The provinces that contribute the least percentages include Limpopo with 1% and North West (3%). This data is not consistent with the report by Cape Wools SA, 2019. This variation might be due to the fact that some of the entities are not registered with SARS.

Figure 6: PROVINCIAL DISTRIBUTION OF FIBRE EMPLOYERS REGISTERED WITH AGRISETA



Source: AgriSETA Employer Database, 2019/20

SUBSISTENCE FARMING

All three components of the Fibre sub-sector have very active small-scale and emerging farmer participation.

According to Cotton SA (2019), most of these small scale and emerging farmers produce cotton on dry land. Approximately 20 825 hectares of dry land is cultivated for cotton production.

Small-scale farmers need to grow to achieve economies of scale. Three factors will impact on this:

- It is estimated that collectively the small-scale cotton farmers need additional 3 000 hectares dry land cotton to be cultivated to become economically viable; the DRDLR can play a leading role in this regard.
- Small-scale farmers need to own their own ginnery so that they can have control over the seeds they remove (which is 54% of the mass of raw cotton) and be able to sell it (sold as high protein animal feed) and do their own value adding through the production of lint for the export market.
- Small-scale farmers need to farm in a co-operative manner to enable them to share capital equipment, input costs, harvesting and logistics.

The key drivers of improved small-scale wool farming are the activities of the NWGA and Cape Wools with the support of wool businesses such as BKB and OVK. It is estimated that there are four million wool sheep owned by 30 000 small-scale farmers and 180 000 family members. These communal farmers produce approximately 13% of South Africa's clip, although it is not generally of a good quality. These farmers are supported with the establishment of district shearing sheds, shearing, classing and baling training and the introduction of high well-bred rams to increase the quality of the stock.

The mohair industry established the Mohair Empowerment Trust with the aim to support and capacitate small- scale mohair farmers. This process started in 2011 when the first farmer received support. Today there are 28 empowerment projects in the mohair industry. The vision of the Empowerment Trust is to:

- Ensure a sustainable supply of mohair by establishing emerging farmers in financially viable Angora goat farming operations.
- To establish successful black participants and entrepreneurs in the mohair pipeline.
- To maintain and expand job opportunities for black employees within the established mohair operations in the industry.

1.6. LABOUR MARKET PROFILE

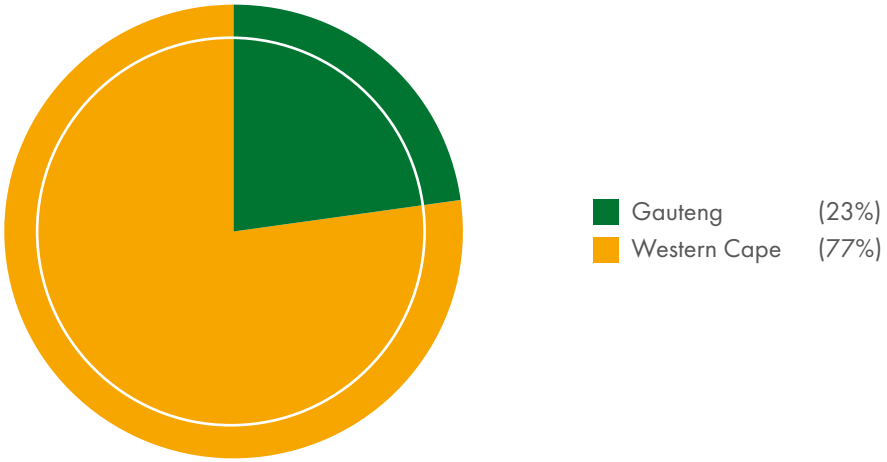
There is no reliable labour market information available on the Fibre sub-sector. This is mainly due to the fact that the enterprises and their employees are generally not registered with this sub-sector but rather with other sub-sectors – e.g. cotton farmers registered with horticulture, and wool and mohair farmers with red meat.

Based on the statistics from Cape Wools there are 8 000 commercial produces. Employment figures provided by the NWGA there are approximately 35 000 employed by farms. Information sourced from shearing service providers i.e. BKB, OVK and private providers indicates that there are about 4 000 shearers and wool handlers employed in the sector.

PROVINCIAL DISTRIBUTION OF EMPLOYEES

According to AgriSETA WSP Submissions (2019/20) there is a total of 463 employees under Fibre sub-sector. The following figure summarizes the provincial distribution of employees across the provinces. According to the WSP/ATR, the companies who submitted are from the Eastern Cape and Gauteng province. Thus, the pie chart shows the distribution of employees between these two provinces. The results indicate that 77% of employees are in Western Cape while the remaining 23% come from Gauteng.

Figure 7: PROVINCIAL DISTRIBUTION OF FIBRE EMPLOYEES

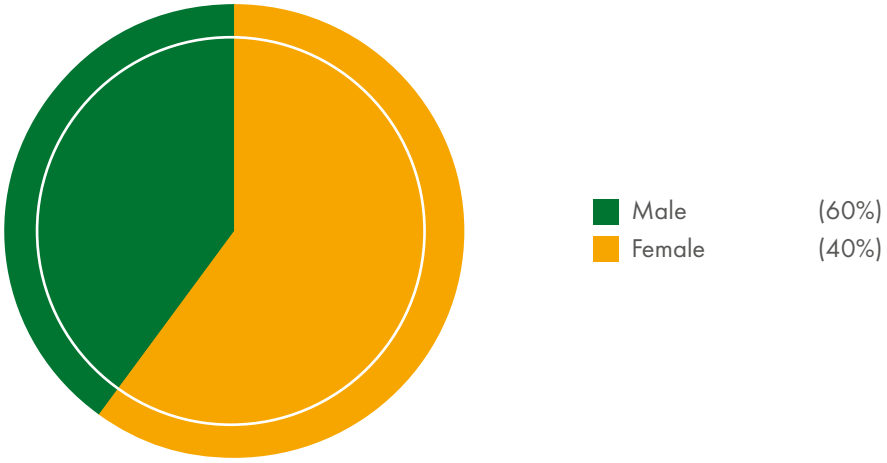


Source: AgriSETA WSP Submissions, 2019/20

GENDER

The graph below gives a breakdown of the Fibre sub-sector employees by gender as reported in the WSP submissions (2019/20). Data shows that the highest proportion of employees are male, accounting for 60% of total employment, while females make up the other 40%.

Figure 8: EMPLOYEES BY GENDER

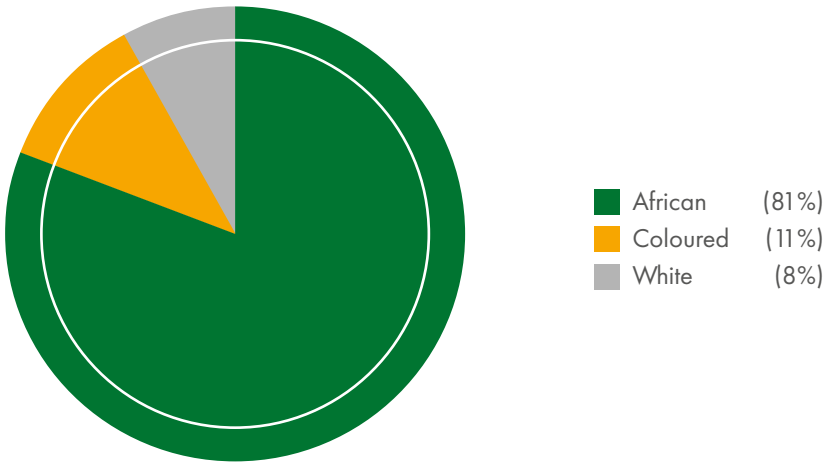


Source: AgriSETA WSP Submissions, 2019/20

RACE

The AgriSETA WSP (2019/20) shows that the vast majority of employees in the sub-sector are black Africans (81%), followed by coloured employees (11%), and white employees (8%).

Figure 9: EMPLOYEES BY RACE

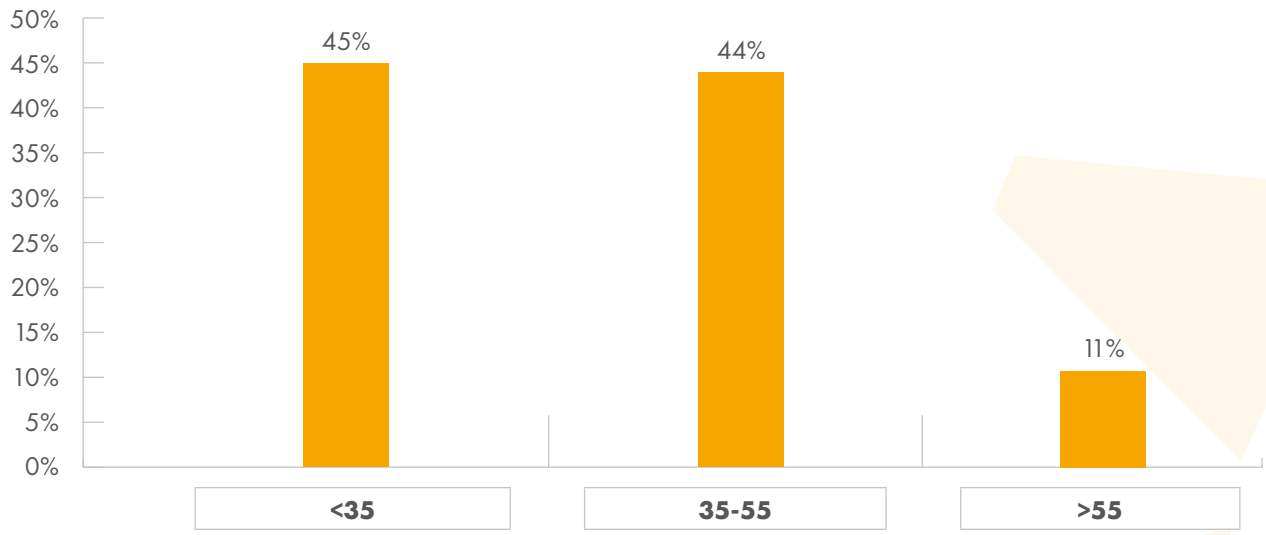


Source: AgriSETA WSP Submissions, 2019/20

AGE

The majority of people employed in the Fibre sub-sector (by employers that submit WSPs) are younger than 35 (45%); followed by employees who are in between the age of 35 and 55. Employees older than 55 account for 12% of all employees in the sub-sector. Overall, 89% of employees in the sector are 55 years old and younger.

Figure 10: EMPLOYEES BY AGE



Source: AgriSETA WSP Submissions, 2019/20

OCCUPATIONAL CATEGORIES

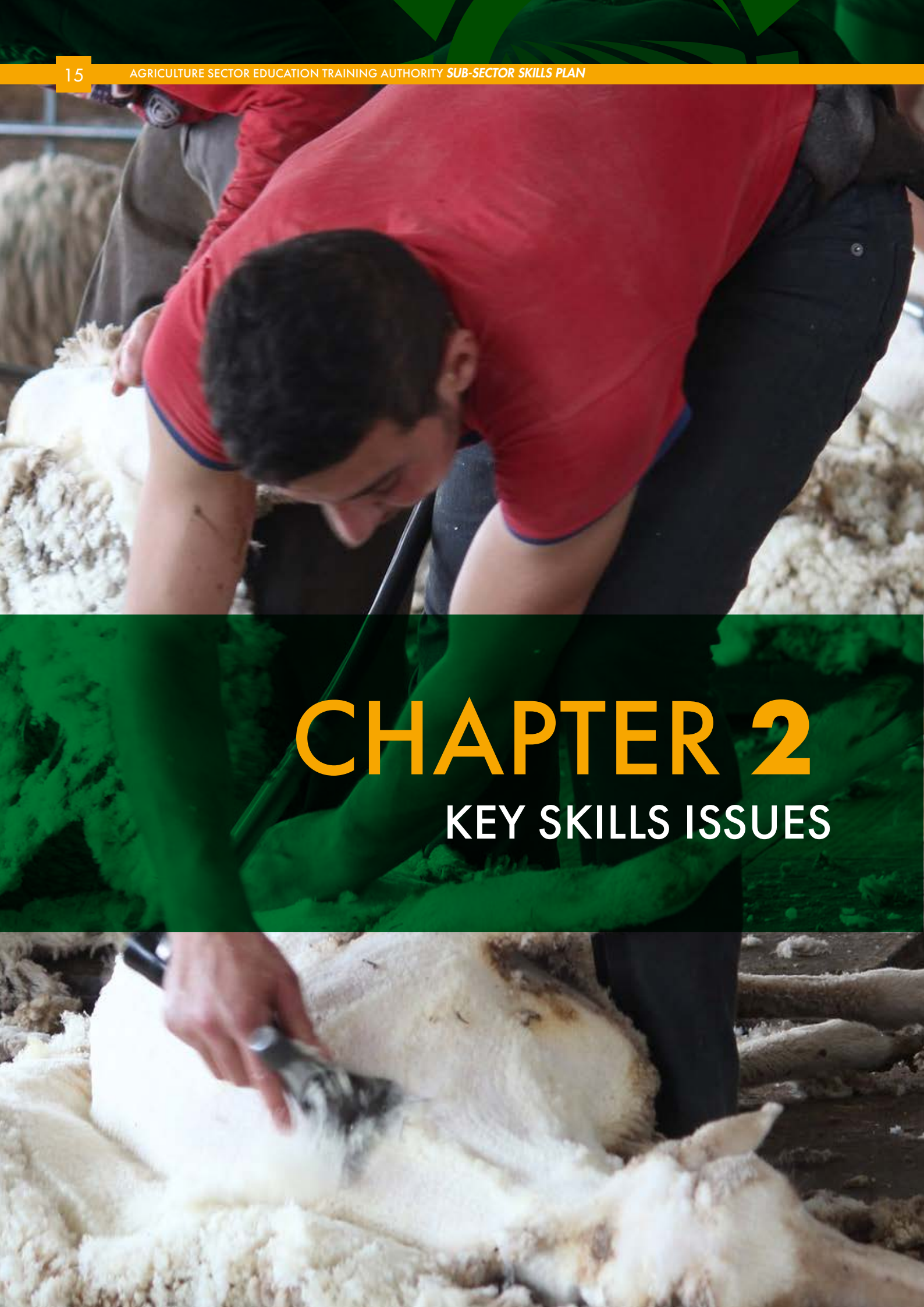
Looking at the existing skills in the Fibre sub-sector as reported in the WSPs submitted for 2019/20, it is clear that skills vary from high-level skilled professional and clerical support worker's occupations to relatively low level skilled elementary occupations.

1.7. CONCLUSION

The Fibre sub-sector is small and has only a few employers registered with the AgriSETA. Because wool and mohair farmers farm with animals, most of them have registered with Red Meat sub-sector and similarly cotton farmers registered with the Horticulture sub-sector.

The sector is, however, an important one as cotton, wool and mohair are exported (mainly to the EU and China). The local mohair industry is the largest in the world and accounts for more than 50% of global production.

It is important to note that the three components of the sub-sector are presently developing small-scale and communal farmers, and each of the leading employers' associations has a dedicated function and budget for transformation.



CHAPTER 2
KEY SKILLS ISSUES

2.1. INTRODUCTION

This chapter is concerned with two specific areas that shape the key skills issues in the Fibre sub-sector. Firstly, it looks at factors that are driving change in the sub-sector. Secondly, the alignment of sector skills planning to national strategies and plans will be analysed to provide a snapshot of the key policy and planning documents that shape skills planning in the Fibre sub-sector.

2.2. CHANGE DRIVERS

There are general factors (the green economy) and specific sub-sector issues (shortage of shearers) that presently influence skills demand and supply in the Fibre sub-sector. These were identified through thematic synthesis and triangulated through internal and external stakeholder engagement, desktop research and policy documents.

Approximately 55% of the shearers employed in South Africa are Lesotho citizens. This has become problematic seeing that the Department of Labour is reluctant to approve any further work permits to foreign workers (the department is on a drive to give South Africans more employment opportunities). To rectify the situation, the wool industry has put initiatives in place to train more South Africans in shearing skills. Sheep shearing is, however, hard labour and recruitment of South Africans remains a challenge. Financial support from AgriSETA in the training of shearers remains a high priority and shearing remains a scarce and critical skill.

GROWTH OF SMALL-SCALE FARMERS

Small-scale farmers do not have the knowhow to properly manage their businesses nor do they have the technical skills to withstand external influences such as:

- Managing extreme climate change (drought and floods)
- Delivering a quality product (clean and non-damaged wool, mohair and cotton)
- How to expand their businesses
- Managing challenges coupled with communal farming practices
- In the case of wool sheep and Angora goats – how to manage predators.

Major skills issues:

- Build entrepreneurial skills
- Technically focus on animal and plant health skills

EXTENSION ADVISORS

Well capacitated extension advisors can be a major driver of change in the fibre sub-sector, especially insofar as they can support small-scale farmers and out-growers. Government extension officers needs prioritised attention.

Major skills issues:

- Retraining of extension officers on the modern qualifications developed jointly by AgriSETA and DAFF
- Focus specifically on animal health issues and ensure that farmers understand and apply sound breeding practices
- Focus specifically on the management of cotton fields, scouting and plant protection.
- CPD whereby extension officers engage on a regular basis with various commodity organisations to keep in touch modern developments

POLITICAL UNCERTAINTY

Like other agricultural entities in South Africa, wool industry is also affected by political uncertainties. Political uncertainties between departments lead to holding back on agreements with commodity structures to provide upfront capital and operational inputs. Further, these uncertainties affect the import and export regulation, therefore affecting the economy of the country.

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. These sustainable practices

require new knowledge and skills that cuts across farming enterprises of all sizes. The need for green knowledge is conveyed through industry-specific training interventions across different sub-sectors. Green knowledge, at this stage, is largely a higher NQF level skill. Research and development on the role of green knowledge in the agricultural skills sector should be conducted. For instance, there is need for the up-skilling of farm workers in energy-efficient methods, resource sustainability, agro-processing and other green technologies. This should also be done through coordination with other sectors, given the cross-cutting nature of environmental concerns (Environmental Sector Skills Plan, 2018). The green economy is also related to predation – this is an emotional matter and needs to be managed by the industry.

STOCK THEFT AND PREDATION

Statistics show that in the previous decades there was high level of stock theft cases within the livestock industry. Stock theft figures for 2017/2018 indicate that most sheep were stolen in the Eastern Cape. The Free State is the second place and then Northern Cape (SAPS, 2018). This resulted in low wool production in South Africa.

MANAGING EXTREME CLIMATE CHANGE (DROUGHT AND FLOODS)

Climate change impacts the South African wool sector. Principally through effects on forage and water resources, land carrying capacity and sustainability, animal health and competition with other sectors. The nature and scale of these impacts will vary between the wool growing regions, depending on manifestation of the climate change. There is a need to provide the wool producers with skills to manage wool sheep production systems, breeding strategies, pastures, diseases and nutrition of animals to keep up with the impacts of climate change.

EMPLOYMENT EQUITY

Only companies that employ 50 or more people are required to comply with the Employment Equity Act. However, your business's turnover within your industry may place you in a category where you are also required to comply, so it's best to comply voluntarily from the outset and avoid any future issues. In terms of the Act, no one may unfairly discriminate against an employee on grounds of race, gender, pregnancy, marital status, family responsibility, ethnic or social origin, colour, sexual orientation, age, disability, religion, HIV status, conscience, belief, political opinion, culture, language, and birth.

BIOSECURITY

Biosecurity means maintaining mechanisms that do not currently exist on a property. The effects of a severe epidemic of disease may put the entire company at risk. The practices in a good biosecurity plan minimize the occurrence of disease and ensure that, if the farm gate controls break down and a disease incursion occurs, the disease is confined to a small part of the farm, making it easier and less costly to control.
For instance, Food and Mouth Disease (FMD) outbreaks have occurred in some areas of South Africa. This was due to inadequate biosecurity measures around the farms. The outbreak of Food and Mouth Disease (FMD) adversely affected the export market. China which is the importer of large quantity of wool from South Africa, suspended the imports of wool during that period.

2.3 ALIGNMENT OF SKILLS PLANNING TO NATIONAL STRATEGIES AND PLANS

The following section draws attention to the national strategy and planning documents that frame AgriSETA's mandate for skills development. All of these legislative and policy frameworks speak to AgriSETA's Constitutional mandate, as a Public Institution governed by the Public Finance Management Act, to develop learning programmes and facilitate the implementation thereof 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. Both of 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.

PESTEL

The political, economic, social, technological and legal (PESTEL) factors need to be taken into consideration when prioritising skills development initiatives in the sector.

Table 5: PESTEL FOR THE FIBRE SUB-SECTOR

FACTOR	POSSIBLE IMPACT
Political	Transformation remains high on the political agenda. The Fibre sub-sector (all three elements) reacts well to this pressure and has extensive programmes in place to advance transformation. Political uncertainties between departments lead to holding back on agreements with commodity structures to provide upfront capital and operational inputs. This affects the industrial growth. Animal theft is damaging the profitability of the sector. Crime on farms (commercial and non-commercial) must be addressed by government. The newly adopted policy of land expropriation without compensation, if not well managed, can have a devastating effect on the agricultural sector and its ability to produce sufficiently to satisfy the needs of the South African population
Economic	All three elements of the Fibre sub-sector is experiencing high volumes of exports and currently the prices for all three commodities are healthy. South Africa is not doing enough to add value to primary production – most cotton is processed to lint stage, wool and mohair is classed and baled and all are sold at this semi-processed stage. Only small volumes of cotton, wool and mohair remains in the country to be processed into final consumer products. If small scale and communal farmers are to make a real contribution to production volumes, the yield of their production needs to be increased and the quality of their product improved. In the case of the latter for all three commodities it is a matter of improving the cleanliness of the product and to ensure that it is not damaged – thus focus should be placed on the growing phase as well as the harvesting of the product The value of small stock theft and predation is now estimated at R2 billion per year (note: this for all small and large stock) From an economic perspective, it is important to note that whilst the cotton industry creates 0,3 jobs per hectare, it creates 1,8 jobs throughout the value chain ("field to fashion")

FACTOR	POSSIBLE IMPACT
Social	Fibre farming is very popular amongst poor rural people. Large numbers of people (family) are dependent on a single small-scale farmer. The attractiveness of the industry (all three commodities) needs to be addressed – the farmer population is older and ageing, and needs to be replaced by young well-trained farmers.
Technological	Animal and plant health is becoming increasingly important to the Fibre industry. International competition requires a good quality product be presented – this is only possible if the product is harvested from quality and healthy sources. Agricultural extension officers are required to be reskilled – their support is simply insufficient and they are not perceived as being competent. Whilst commodity organisations have taken the lead, there is a need for government officials to partner the private sector in the support given to farmers. The cultivation of cotton uses less water than most other planted commodities in that it is drought resistant (it has a taproot system) and can handle very high temperatures
Legal	Minimum wages have a negative effect on the industry. Land tenure for small-scale farmers remain a challenge.

2.4 IMPLICATIONS FOR SKILLS PLANNING

In this chapter we have seen that the legislative and policy frameworks established by government, coupled with the contextual change drivers and industry specific perspectives on skills development point to the following seven skills implications that need to be addressed in the Fibre Sub-Sector Skills Plan.

7 Skills Implications (for Commercial and Small Scale Enterprises):

- Develop small-scale farmers' business and entrepreneurial skills;
- Train small-scale farmers in better understanding of animal and plant health and breeding practices;
- Technical matters such as pre-grading handling of cotton, proper classing of wool and mohair which will impact positively on prices attained at markets. The cotton industry, similarly to the horticulture industry have to meet international standards – the BCI is similar to the GAP initiative and requires farmers (commercial and small scale) to meet certain requirements prior to participating in export programmes;
- Mentorship cannot be the task of commodity organisations alone – DAFF and the provincial departments of agriculture need to devise a plan on how to capacitate extension officers to make a productive contribution and how to keep up-to-date with development in the industry;
- Predation: skills in how to manage this problem in a humane and acceptable manner;
- Knowledge with regards to natural resources and economic management; and
- Management of disasters (floods, droughts and wild fires).

2.5 CONCLUSION

All three components of the Fibre sub-sector – mohair, wool and cotton – are expanding and are well suited to the small-scale farming sector. From a skills perspective this must be understood well as it has definite implications for training and the AgriSETA's allocation of funding.

Animal and plant health is a priority for commercial and small-scale farmers alike. Training programs aligned to the needs of each specific industry must be developed and implemented.

Most of the focus should be placed on the small-scale and communal farmers and the good initiatives currently under way must be supported and expanded.

CHAPTER 3
OCCUPATIONAL SHORTAGES AND SKILLS GAPS

3.1. INTRODUCTION

Chapter 3 reflects on the skills demand and supply in the Fibre sub-sector. Information was gathered from the workplace skills plans (WSPs), annual training reports (ATRs) and other relevant sources to enable AgriSETA to accurately define skills mismatches.

Effort was taken to ensure cross sectoral inputs were obtained by reaching out to large levy payers, industry bodies, government departments as well as emerging small-scale entrants into the sector. The key themes emerging from this chapter corroborate the skills implications identified at the end of Chapter 2.

3.2. EXTENT AND NATURE OF DEMAND

A number of factors impact on the demand for skills in the sector. These include international high commodity prices and the weak local currency (which should advance sectoral economic growth, which in turn, should have a positive effect labour demand). In a PESTEL and SWOT analysis of the Fibre sub-sector the following were raised as important factors that impact on skills demand and supply in the sub-sector:

- **Labour Demographic Matters**

It is of great concern that the wool, mohair and cotton farmer population is becoming older. The tentative analysis done on WSPs indicate that 55% of employees (whom in many cases are the farmers themselves) are beyond the age of 35 years. Farming with fibre is not attractive to young people and interviews confirmed that where young people get involved it is mostly because the sector is an "employer of last resort". It also means that should any other opportunity arise, young people will most likely exit the sector.

The workforce is poorly educated. Most of the people, who attended the focus group sessions in rural areas, were illiterate (and could not complete the attendance register without assistance). This was especially true in KwaZulu-Natal and the Eastern Cape. The result is that it limits skills development initiatives and especially theoretical knowledge transfer. Learning interventions are limited to practical "show-and-do" engagements.

The rural farmers and farm workers in cotton, wool and mohair are extremely poor. Poverty limits mobility and as a result, farm workers (who are older and the majority) tend to remain on the farm doing the same work life-long. Very little development happens. Even more concerning, the same applies to the small-scale and communal farmers – they are simply too poor to progress and live from hand-to-mouth. Securing inputs (seeds, pesticides and fertilizer) is a repetitive challenge – if not directly supported by government on an annual basis, many small-scale farmers cease to exist.

- **Commercial Enterprises**

The focus with commercial enterprises in the Fibre sub-sector is not so much on technical matters but on larger macro socio economic issues such as:

  - Natural resource management
  - Economics
  - Planning and management of natural disasters

- **Extension Officers**

Extension officers need to be re-trained. Today their focus should not only be on technical aspects (although this remains the first priority and is currently lacking) but also on social impact issues such as how community property associations (CPAs), trusts, co-operatives and other forms of communal farming function.

The AgriSETA, in partnership with DAFF, developed new qualifications for extension officers. Although accepted by all (industry, government and academic institutions), the implementation thereof remains very limited. There is a need to prioritize the training (and re-training) of extension officers.

- **Veterinarian (Animal Health) Related Skills**

Resuscitating the 11 agricultural colleges is a slow and tedious process. At this stage only Tsolo Agricultural College produces animal health technicians – as a result there is a

shortage of scientific support to farmers. This coupled with the limited knowledge of extension officers – also in the field of animal and plant health – result in a general lack of knowledge (as very little knowledge is transferred to the farmer and his workers). Farmers, commercial and small-scale frequently rely on advisory services from input suppliers.

- **Labour Market Information**

Comprehensive and accurate labour market information on the Fibre sub-sector is lacking. As stated in Chapter 1, this is mainly due to employers not registering under the fibre SIC code, but rather under other farming codes such as red meat and horticulture. This matter requires urgent attention from AgriSETA.

- **Recruitment**

Recruitment of SA citizens to take up shearing as their occupation remains a major challenge as more that 55% of shearers in SA are Lesotho citizens. Field and other personnel (shearers and advisors) are generally recruited after obtaining a suitable skill / qualification.

- **Hard-To-Fill Vacancies**

Hard-to-fill vacancies (HTFV) are those vacancies which can take six months or more to fill. The industry identified the following three occupations as HTFV.

Table 6: GENERAL PRIORITY SKILLS FOR THE FIBRE SUB-SECTOR

HTFV	Reason	Demand and Supply	SETA intervention
1. Auctioneer	Equity reasons	No dedicated training programme for auctioneers	• Develop with the industry a relevant programme applicable to wool and mohair.
2. "Call and shoot" professionals	The industry is moving towards the professional management of predation and removal of predators in an acceptable and legally justifiable manner	This is a new occupation to be implemented with the support of DEA	• Work with wool and mohair industry and DEA to formalise the training and qualification of professional predator control experts
3. Laboratory technicians	General scarcity – lack of supply from tertiary institutions	Not a popular study area – not sufficient supply	• Engage with employers and tertiary institutions
4. Predation Management Specialist	General scarce skills	Limited credible training providers	• Funding support for skills programme on various levels of advancement
5. Sheep shearing	Qualified shearers willing to do the hard labour.	Very limited skilled supply in SA. Depended on Lesotho supply.	• Funding for training on the various levels of advancement

SCARCE AND TOP-UP SKILLS

Scarce and top-up skills are determined by considering the HTFV and what is reported by commodity organisations. Unfortunately, the number and quality of WSP/ATRs for the Fibre sub-sector is inadequate for analysis.

Scarce Skills

Generally, skills are available in the Fibre sub-sector and the focus is on top-up skills rather than on scarce skills.
The sub-sector has, however, identified the following specific scarce skills:

1. *Animal health technicians* – In the fibre industry animal health is paramount in the production of high quality wool and mohair. South Africa does not train sufficient animal health technicians. Only three tertiary institutions focus on animal health, namely the Veterinary School at Onderstepoort in Pretoria (University of Pretoria), Tsolo Agriculture and Rural Development Institute (TARDI) in the Eastern Cape and the University of the North West. An animal health course is also offered by UNISA.

2. *Predator controller* – This is a new occupation that sees a person trained to "call" predators and then to eliminate them in a legal and humane manner. It is foreseen that predator controllers will have to register formally with DEA.

3. *Cotton business managers* – The cotton industry lacks junior and middle management which limits the industry with forward planning and organising. This is applicable to both commercial and small-scale and co-operative enterprises.

4. *Sheep shearing* – This is a skills acquired through practice, it is hard labour and most SA citizens are not skilled in sheep shearing.

Top-Up Skills

For the commercial sector in the Fibre sub-sector, the top-up skills required are:

- Predation management programmes (for wool and mohair)
- Natural resources management
- Understanding macro- and micro economics
- Planning and management of natural disasters

For the small scale and communal farming sector, the focus should be on:

- Animal and plant health
- Protection of sheep and goat flocks and cotton fields
- Basic business and entrepreneurial skills

For the wellbeing of the broader Fibre subsector, the following should be prioritised:

- HIV/ Aids training should be included in all training mentioned.
- Animal welfare need to be included in Livestock training, as well as codes of best practice, issues related to sustainable production and the environment.
- Practical experience is essential for novice shearers / Classers to improve skills
- Sheep shearer instructors need the following basic skills:
  - Literacy (Read & Write)
  - Communication and language skills
  - Driver's licence

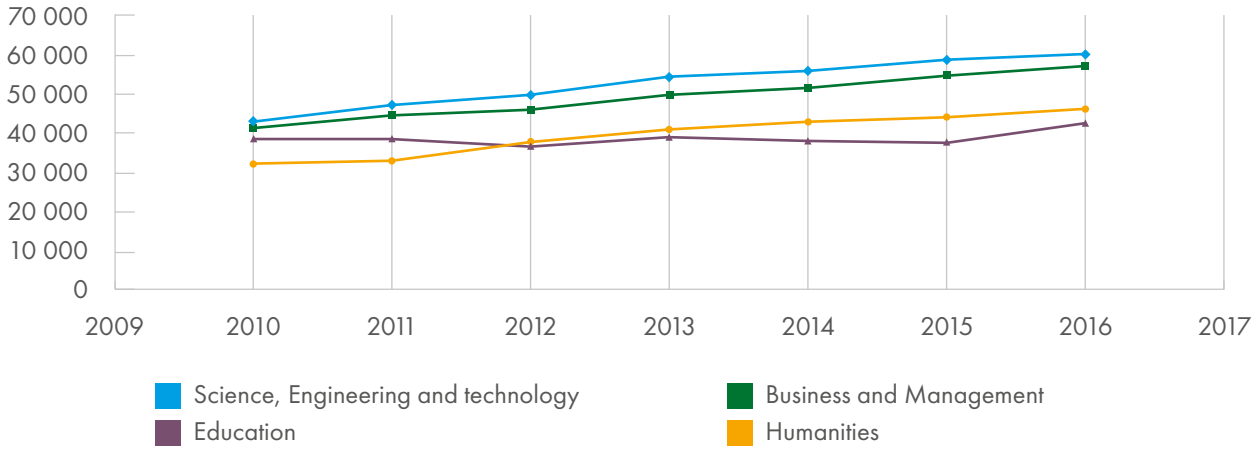
3.3 EXTENT AND NATURE OF SUPPLY

It is crucial to examine the extent of occupational supply in the sector, the state of education and training provision and challenges that may be affecting the supply of skills to the sugar sub-sector. This section supplies details on the learners currently enrolled at training institutions, as well as the learners graduating into the labour market.

HIGHER EDUCATION INSTITUTIONS

Agriculture is categorised under Science, Engineering and Technology. According to the Council on Higher Education (2018), the annual increase rate of learners graduating in science, engineering and technology stands at 5.5%. This low number of learners graduating annually puts a strain on skills supply to the sub-sector and has a negative effect on the skills pipeline to address identified gaps (the data cuts across all qualifications).

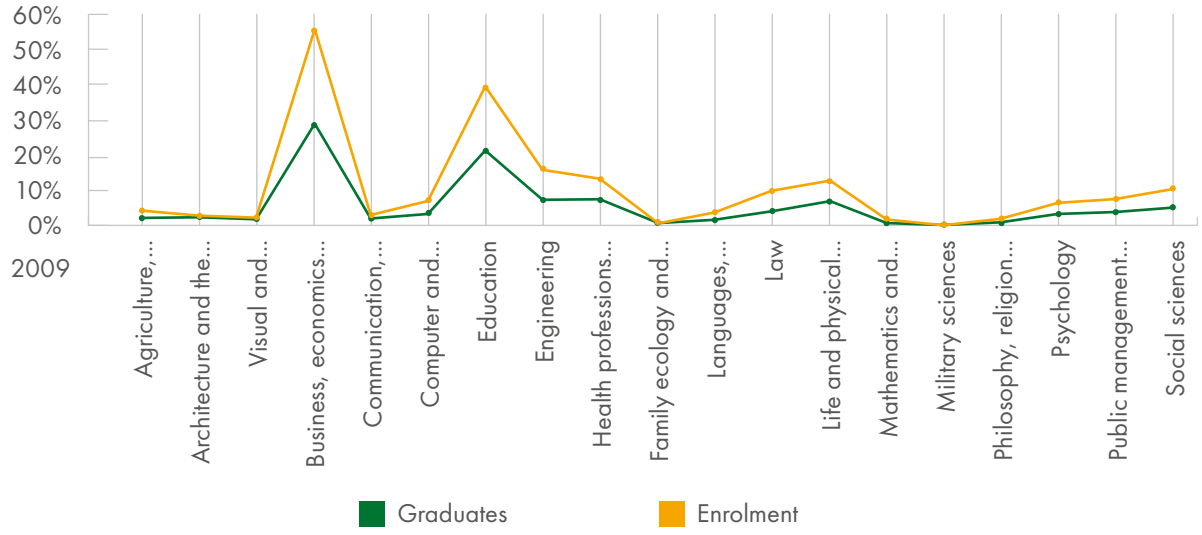
Figure 11: PUBLIC UNIVERSITY GRADUATES BY MAJOR FIELD OF STUDY



Source: CHET (2018)

The figures below show public universities and technikons by classification of educational subject matter category enrolment and graduates in, 2000–2016. The below figures sure a clear indication of agriculture, agricultural operations and related sciences learners who enrolled and graduated in 2016. Agriculture, agricultural operations and related sciences ranges among the lowest at (2%) CESM for both enrolment and graduates. This has a direct impact in closing the scarce skills gaps in the sector.

Figure 12: NUMBER OF ENROLMENT 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 the employers in the sector undertake. In 2019/20, employers indicated in their annual training reports (ATRs) that a total of 78 training interventions were attended by employees in the Fibre sub-sector.

The table below outlines the training received in the sub-sector by occupational category and gender. The results show that an equal proportion (50%) of male and female employees were trained. Consistent with the employment breakdown of the sub-sector outlined in Chapter 1, the majority of employees that received training were elementary workers (63%); followed by plant and machine operators and assemblers (9%) as well as skilled agricultural, forestry, fishery, craft and related trades workers (9%). Employees in the 'professional' category received the least training (1%).

Table 7: EMPLOYEES TRAINED BY OCCUPATIONAL CATEGORY AND GENDER

FINANCIAL YEAR	MALE	FEMALE	TOTAL	%
Managers	3	1	4	5%
Professionals	0	1	1	1%
Technicians and Associate Professionals	2	3	5	6%
Clerical Support Workers	0	1	1	1%
Service and Sales Workers	0	4	4	5%
Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers	2	5	7	9%
Plant and Machine Operators and Assemblers	7	0	7	9%
Elementary Occupations	25	24	49	63%
Grand Total	39	39	78	100%

Source: AgriSETA, ATR Data, 2019/20

3.4. SECTORAL PRIORITY OCCUPATIONS LIST (PIVOTAL)

The Grant Regulations (DHET, 2012) defines Sectoral Priority Occupations (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 (PIVOTAL) programmes to be programmes that respond to the supply of identified skills demands. Sectoral Priority Occupations (PIVOTAL) programmes respond mainly to the scarce skills list.

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

The AgriSETA's Sectoral Priority Occupations (PIVOTAL) list 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 undertaken with major agriculture players, sub-sectors and industry representatives throughout all the provinces within South Africa 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 (PIVOTAL) list 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 8: THE AGRISETA 2019/20 SECTORAL PRIORITY OCCUPATIONS (PIVOTAL) LIST

OCCUPATION CODE	OCCUPATION	SPECIALISATION/ ALTERNATIVE TITLE	INTERVENTION PLANNED BY THE SETA	NQF LEVEL	NQF ALIGNED	QUANTITY NEEDED	QUANTITY TO BE SUPPORTED BY SETA
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		
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
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
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
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
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

OCCUPATION CODE	OCCUPATION	SPECIALISATION/ ALTERNATIVE TITLE	INTERVENTION PLANNED BY THE SETA	NQF LEVEL	NQF ALIGNED	QUANTITY NEEDED	QUANTITY TO BE SUPPORTED BY SETA
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
2017-611202	Horticultural Farmer	Horticultural Production Supervisor, Horticultural Farm Foreman	Learnerships Skills programme	1 and 2	Yes	1 534	2 995*
2017-671202	Millwright	Winder Technician, Electromechanician, Machine Tool Millwright, Ground Electromechanician, Millwright (Electromechanician), Printers Mechanic	Artisan	3	Yes	1 470	233
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*

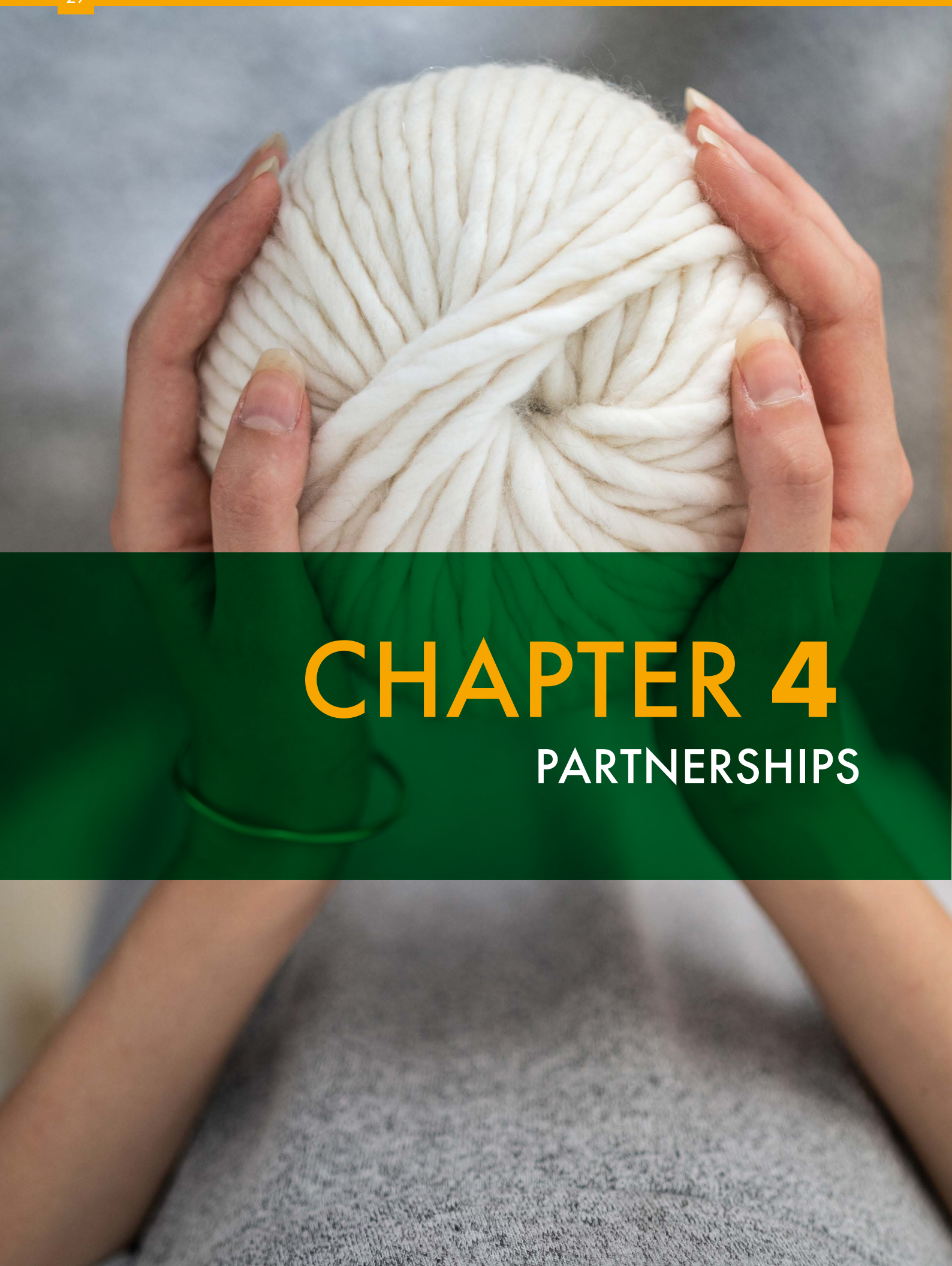
3.5. CONCLUSION

The data presented in this chapter highlighted the current skills gaps in the broader agricultural sector and in the Fibre sub-sector. The sub-sector needs the following specific scarce skills:

1. *Animal health technicians* to ensure the production of high quality wool and mohair.
2. *Predator controllers* to reduce losses that sheep farmers suffer when their flocks are attacked by numerous predators.
3. *Business managers* to take responsibility for planning and organising in the cotton industry.
4. *Sheep shearing* as there is an acute shortage of shearers in South Africa.

This means that there is a need to develop relevant programme applicable to wool and mohair. Further, engage with employers and tertiary institutions to address the scarce skills.

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

To achieve the relevant and targeted skills provision that promotes economic sustainability in the agricultural sector, as well as meeting the needs of all South African communities (both rural and urban) in terms of food provision and sustainable livelihoods, AgriSETA recognises that it must create partnerships with:

- SETAs in other sectors;
- Public service and government;
- Public TVET colleges;
- Large employers and industry bodies within the sector; and
- Co-operatives, NPOs and community based organisations.

The purpose of this chapter is to assess the nature of partnerships that AgriSETA has established and propose measures for deepening such partnerships in the future.

4.2 EXISTING PARTNERSHIPS

The most prominent partnerships in the Fibre sub-sector are outlined in the table below. These partnerships developed over time and need to be nurtured and protected. Chapter 3 shows that an industry can suffer when partnerships are broken, as was the case with the cotton industry which had partnerships with various agricultural colleges to provide training for the cotton industry. Due to political reasons, these colleges ceased to exist and the industry is now hampered by skills shortages.

Table 9: SECTOR PARTNERSHIPS

Strategic Partnership	Department or organisation	Relevance of partnership
Skills development	AgriSETA and registered training providers	Funding the Fibre industry as a commodity organisation where the industry selects the type of intervention which must be industry-wide Funding of learning interventions of individual industry enterprises based on applications put forward to AgriSETA.
Industry protection	DAFF *[changed to DALRRD – Department of Agriculture, Land Reform and Rural Development]*	Work closely with DAFF on regulatory requirements with regards to predators. Support for small-scale cotton farmers. Re-alignment of agricultural extension officers.
	UP Veterinarian school, Onderstepoort/Tsolo Agricultural College	Joint efforts to ensure that sufficient animal health technicians and nurses are available.
Agri-processing	DRDLR *[changed to DALRRD – Department of Agriculture, Land Reform and Rural Development]*	Joint programme with DRDLR to establish shearing sheds and introducing quality rams to improve quality of wool sheep. Provision of land and capital support to small scale cotton farmers.

4.3 EMERGING PARTNERSHIPS

Only one new partnership was identified by the sub-sector and that is in the cotton industry. This is a partnership between Cotton SA (on behalf of the industry) and BCI (Better Cotton Initiative). The Better Cotton Initiative exists to make global cotton production better for the people who produce it, better for the environment in which cotton grows, and better for the sector's future by developing better cotton as a sustainable mainstream commodity.

The Better Cotton Growth and Innovation Fund makes strategic investments into Better Cotton projects to propel the Better Cotton Initiative towards its 2020 targets. The fund identifies, support and invests in innovations, while fostering adoption of the Better Cotton Standard System by governments, trade associations and other entities. It is advisable for AgriSETA to take note of this partnership and to dovetail its support with initiatives from BCI. AgriSETA's partnership with Cotton SA should facilitate this.

4.4 CONCLUSION

Apart from maintaining the partnerships above, the Fibre sub-sector has to ensure that it rebuilds partnerships with agricultural training institutions (ATIs) – especially given the importance of developing small-scale farmers in mohair, wool and cotton. AgriSETA as a member of the Association of Principals of Agricultural Colleges (APAC) is in an ideal position to facilitate such partnerships. Partnerships with other SETAs will also be pursued to align the AgriSETA's priority skills areas and Sectoral Priority Occupations (PIVOTAL) skills lists to national interests.

CHAPTER 5
SKILLS PRIORITY ACTIONS

5.1. INTRODUCTION

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

These recommendations are founded on national policy and sectoral change drivers (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 Fibre sub-sector.

5.2 KEY FINDINGS FROM PREVIOUS CHAPTERS

Chapter 1 illustrated that the Fibre sub-sector may not be one of the largest sub-sectors demarcated to AgriSETA, but it has two important characteristics: most of its outputs are exported and it creates opportunities for small-scale and communal farmers to participate in the economy. The sub-sector consists of wool, mohair and cotton.

The immediate economic outlook is positive and coupled to the weak local currency, creates opportunities for increased export and growth of the industry.

The growth of the sub-sector will, however, be hampered by an ageing farmer population, poor education levels of farm workers and small-scale farmers, and extreme levels of poverty which incapacitate small-scale farmers to grow and expand.

Key skills issues (Chapter 3) are that small-scale farmers need both entrepreneurial/business skills, skills in improving their animal and plant stock (animal and plant health) whilst commercial farmers need more knowledge on managing the predator challenge, natural resources, economic matters and managing natural disasters.

From a skills supply perspective, the biggest challenges are (i) that there are insufficient animal health technicians and nurses, and (ii) new and modernised qualifications are not being implemented to improve the ability of extension officers to contribute to the well-being and growth of the sub-sector (especially of small-scale and communal farmers).

Strong and longstanding partnerships (Chapter 4) exist in the sub-sector among industry stakeholders and DRDLR on long-term funding and support for shearing sheds and the introduction of good quality rams to the rural sheep flock. Similarly, there are strong partnerships between the industry and AgriSETA such as the long-term funding of shearer training and support for small-scale cotton farmer.

5.3 RECOMMENDED ACTIONS

The Fibre sub-sector is a well-established sector. While it is small in terms of the number of enterprises registered with AgriSETA and their collective levy contribution, it is in fact a very large agricultural sector. Most of the enterprises are registered with AgriSETA under red meat or horticulture SIC code – this needs to be rectified.

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

(1) Business Acumen

It is proposed that the sub-sector work closely with AgriSETA and interrogate the NVC 2 and NVC 4 curricula. If relevant, these qualifications must be tailored to meet the needs of fibre 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) Specific Skills

- Animal Health Technicians. Due to the severe shortage, consideration should be given of how to expand the supply beyond Onderstepoort Campus (UP Faculty of Veterinary Science) and Tsolo Agricultural Institute.
- Professional Predator Control Officers. This needs to be recognised as a new occupation and the AgriSETA should engage with it accordingly (development of qualifications and learning material, focused funding)
- Agricultural Extension Officers. The relatively new qualifications for agricultural extension officers should be implemented more widely and should be a core component of their CPD.
- Commercial Farmers need to be exposed to CPD in matters such as disaster management, natural resource management and understanding macro- and micro economics.

(3) Demarcation of the sub-sector

The following recommendation is made: Labour market information is lacking for the sub-sector due to the fact that many of the sector's members are registered under incorrect SIC codes and are resorting under other sub-sectors. This will require dedicated attention and it is recommended that the matter be prioritised on the AgriSETA research agenda.

5.4 CONCLUSION

The fibre sub-sector has good growth potential and prospects for earning foreign revenue. Some of the priority skills and key priority actions needed in the fibre sub-sector include: developing tailor-made programmes that stimulate business acumen/entrepreneurship; training more animal health technicians and nurses, and modernising qualifications to improve the ability of extension officers to contribute to the well-being and growth of the sub-sector (especially of small-scale and communal farmers). As many Fibre entities are registered under incorrect SIC codes, the AgriSETA needs to assess the extent of the problem and take the necessary steps to rectify it.

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