



**Western Cape  
Government**

Agriculture

**BETTER TOGETHER.**

Louw Pienaar  
Macro & Resource Economics  
Email: [louwpp@elsenburg.com](mailto:louwpp@elsenburg.com)  
tel: +27 21 808 5023

# **The Mohair Industry: Economic Impact of possible market closure**

Louw Pienaar, Andrew Partridge & Tshepo Morokong

JUNE 2018

## Contents

List of Figures .....	1
1. Introduction .....	2
2. Industry Overview .....	2
2.1 National .....	2
2.2 Western Cape.....	4
2.3 Employment.....	5
3. The Mohair Value Chain .....	6
4. Trade Analysis .....	7
2.4 International Trade in Mohair .....	8
2.5 South African Mohair Trade .....	10
5. Mohair Industry Sustainable Production Guideline .....	13
6. Conclusion .....	14
7. Bibliography.....	15

## List of Figures

Figure 1: South African mohair production and exports.....	3
Figure 2: Provincial breakdown of angora goats in South Africa.....	4
Figure 3: Western Cape Goat population per Municipality .....	5
Figure 4: The mohair value chain in South Africa.....	7
Figure 5: International Imports of Raw Fine Animal Hair.....	8
Figure 6: International Imports of Combed or Carded Fine Animal Hair.....	9
Figure 7: International Imports of Combed or Carded Fine Animal Hair.....	10
Figure 8: South Africa's Real Trade in Raw Mohair .....	11
Figure 9: South Africa's Real Trade in Carded or Combed Mohair, 2008-2017 .....	11
Figure 10: Top Destinations for South Africa Combed/Carded Mohair Exports, 2008 & 2017 .....	12

## List of Tables

Table 1: Industry income, costs and gross margin of angora farming.....	4
Table 2: Employment per Municipality for sector: "animal farming and husbandry" ...	6
Table 3: Export Prices of Combed or Carded Fine Animal Hair for Leading Exporters in 2017 .....	12
Table 4: Export Prices of Raw Fine Animal Hair Leading Exporters in 2017 .....	13
Table 5: Mohair industry economic footprint.....	14

## 1. Introduction

On the 1<sup>st</sup> of May 2018, the Washington Post reported on an investigation done on the mohair industry in South Africa by the People for the Ethical Treatment of Animals (PETA). PETA is the world's largest animal rights organisation and it published a video that supposedly shows abuse of Angora goats in some farming enterprises in the country. Since then, as the story spread, various international buyers (>60) of South African mohair products have indicated that they will, or intend to, ban these products. Some of these companies include H&M, Zara, Gap, Topshop and Arcadia Group (Washington Post, 2018; Business Insider SA, 2018). It has subsequently become known that one of PETA's representatives visited a number of Mohair farms in the past few months, disguised as a potential entrant into the industry and wanted to get more information on how to farm with mohair goats. In a statement by the CEO of Mohair South Africa, Deon Saayman concludes that the report and accompanying footage are "factually incorrect and a gross misrepresentation of the South African Mohair Industry" (Mohair SA, 2018a).

Regardless of the validity of the claims and/or whether or not the evidence might be misleading as Mohair South Africa suggest, the economic and socio-economic impact on the industry could be far-reaching. The aim of this short report is therefore to provide an overview of the mohair industry in South Africa and the Western Cape, focusing on production, markets and employment. Additionally, some trade analysis highlighting key macro-economic drivers in export markets will be given. Finally, some insights will be given into the mohair industry production guidelines to provide further clarity, followed by a generic impact calculation on the economic footprint of the industry to get a sense of impact if indeed key markets are closed off to the industry as a result of the allegations of animal abuse. These insights will support sound decision making around this sensitive matter and help the agricultural sector make the best decision in whatever outcome results from the recent events.

## 2. Industry Overview

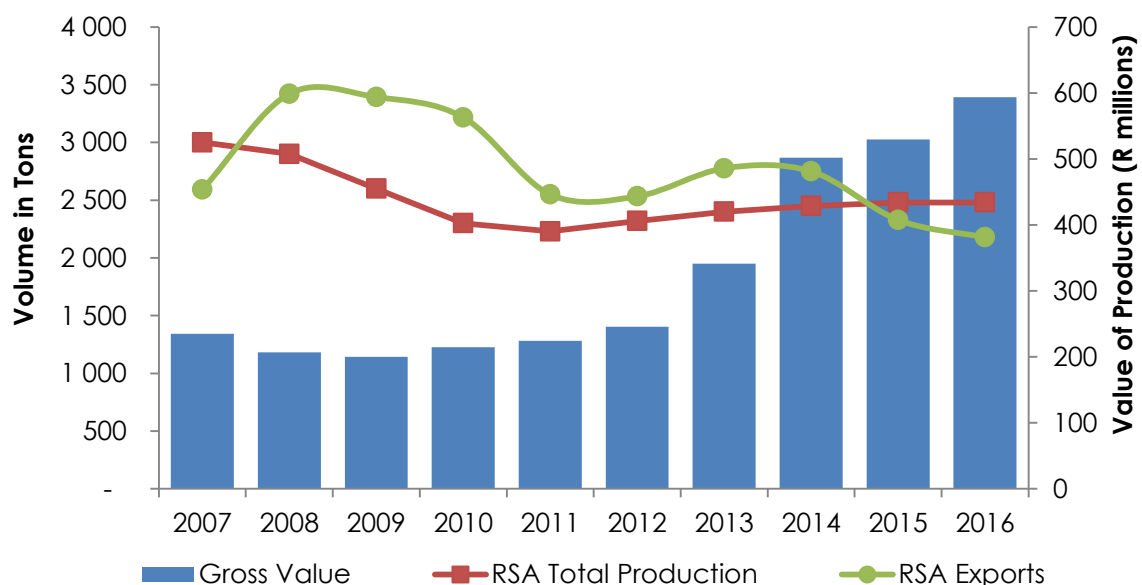
### 2.1 National

The South Africa mohair industry accounts for more than 50% of the global mohair produced (Mohair SA, 2018b). The history of the sector can be traced back to the year 1838 when twelve rams and one pregnant ewe were imported from Turkey to South Africa. In the subsequent years, more Angora goats were imported until 1896 (DAFF, 2016). Since then, the mohair industry grew substantially being supported by favourable arid grazing regions, farmers' expertise, and research and technology. Important to note in the South African context is the fact that 80% of agricultural land is not suitable for crop production, and the majority of this portion is not suitable

for either dairy or beef production. Thus, the small stock industry is of crucial importance in South Africa (Schoeman et al., 2010).

Mohair, produced by the Angora goat, is often referred to as 'The Diamond Fibre' because it belongs to the group of speciality animal fibres which has its application in a wide range of textile end-uses, particularly wearing apparel and household textiles. It is regarded as the most luxurious and best quality fibres available to man, being straight, smooth and naturally lustrous fibre (Hunter, 1993). The birth of the mohair industry took place in Ankara, Turkey, which was the first country to supply mohair as a raw material.

The mohair industry's gross value of production in South Africa was around R593 million in 2017, with decent growth in the sector since 2015 (Mohair SA, 2018b). As highlighted in Figure 1 below, the volumes produce has remained mostly stable over the past decade and only marginally declining to the current output or around 2480 tons of mohair produced (Mohair SA, 2018b). The green line highlight export performance in volume and is often more than the locally produced tons, which can be explained by the re-export of unprocessed mohair that is imported from countries like Lesotho, processed in South Africa and then re-exported to other nations (ITC, 2018). Clearly evident then from Figure 1 is price increases have been the main driver of expansion in the value of production as volumes produced have remained relatively constant.

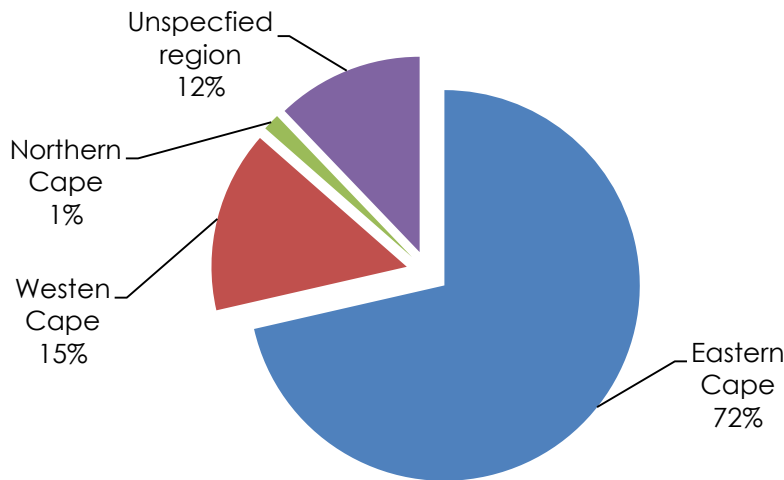


**Figure 1: South African mohair production and exports**

Source: Quantec, 2018a; Mohair SA, 2018; ITC, 2018

Angora goats acclimatise well under conditions of low rainfall and humidity and are intolerant to extreme temperatures, especially when their mohair is being removed. These climatic factors are clearly reflected in Figure 2 which gives the main

producing provinces of Angora goat in South Africa. The Eastern Cape Province is by some margin (72%) the biggest producer of mohair in the country, followed by the Western Cape with around 15% of the total (Mohair SA, 2018b).



**Figure 2: Provincial breakdown of angora goats in South Africa**

Source: Own Compilation using Mohair SA, 2018b

## 2.2 Western Cape

According to Mohair SA (2018b), there are around 855 000 angora goats in South Africa. If one uses the percentage breakdown given Figure 2, then the Western Cape has roughly 128 000 angora goats in the Province. This is in line with the estimate of 150 000 goats in 2013 given from the Agristats web portal hosted the WCDoA (AgriStats, 2013). The slight deviation is probably due to the fact that this number includes other goat-types and not only angora. Table 1 provides some rough income and costs calculations for South Africa and the Western Cape based on a typical farm in the Beaufort West area (WCDoA, 2018) and the number of angora goats of shearing age.

**Table 1: Industry income, costs and gross margin of angora farming<sup>1</sup>**

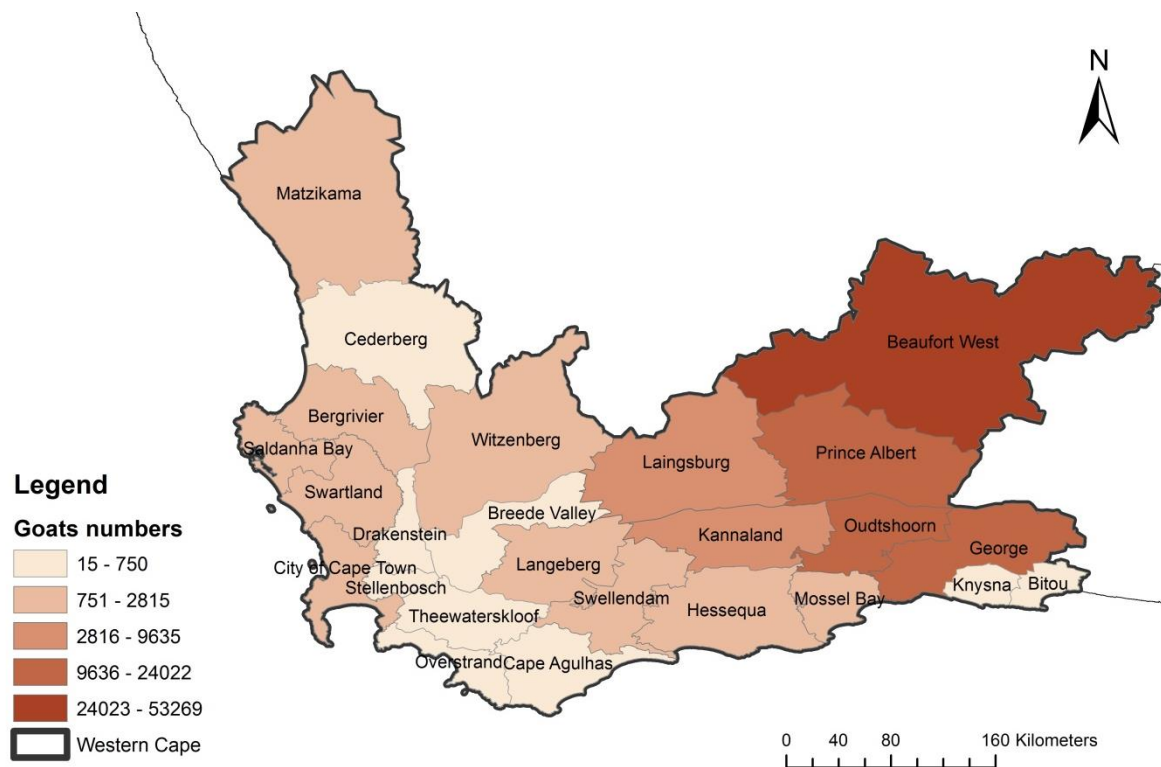
Area	Goats of shearing age	Gross Income (R million)	Direct Costs (R million)	Gross Value Added (R million)
RSA	515 482	536 616	182 368	354 248
Western Cape	77 172	80 336	27 302	53 034

Source: Own Compilation using WCDoA, 2018; Mohair SA 2018b

Figure 3 below is a map of the main producing regions for goats in the Western Cape and it can be clearly seen that those areas closest to the Eastern Cape are where the majority of goats are farmed. These were the municipal areas of Beaufort

<sup>1</sup> This based on a typical farm of 457 head of goats and an average price for mohair of R265/kg, lambing rate of 91%.

West (53 269), Prince Albert (24 022), Oudtshoorn (21 437) and George (19 989) which made up 77% of all goats in the Western Cape.



**Figure 3: Western Cape Goat population per Municipality**

Source: Own Compilation using AgriStats, 2018

### 2.3 Employment

In their recent statement in response to the PETA investigation, Mohair SA (2018a) indicated that the industry employs around 30 000 individuals. After consultation with the industry, it was highlighted that this includes jobs across the entire value chain and not only on-farm employment. Using an industry multiplier of 4-5 jobs per farming unit would suggest that there are around 4 000 – 5 000 people employed on mohair farms across the country. It's much more difficult to estimate the number of jobs for this industry in the Western Cape, but using an employment multiplier of 0.005 per head of goat farmed gives an employment number of 807 on-farm jobs. To test the range of this estimate, Table 2 below gives employment numbers for the main municipal areas listed in Figure 3 provided by the 2011 national census (StatsSA, 2011). It should however be noted that even though these are jobs listed as “animal farming and animal husbandry” it does not exclude other animal types and will therefore include ostriches and sheep which are also farmed in those regions.

Using the 2013 flyover to analyse livestock grazing area and the category for large goat enterprises (larger than 50 goats) it shows that there are around 166 large-scale farming units in the Western Cape (WCDoA, 2013). Applying the same multiplier of 4.5 jobs per unit, the number of jobs for the mohair industry is estimated conservatively at 747 jobs. Thus, the current impact of market closure of mohair from South Africa could seriously threaten the livelihoods of a significant number of families working on mohair farms.

**Table 2: Employment per Municipality for sector: “animal farming and husbandry”**

Municipality	Number	Percentage
George	617	52.29
Oudtshoorn	285	24.15
Prince Albert	160	13.56
Beaufort West	118	10
Total	1 180	100

Source: StatsSA, 2011

As will be seen in the next section, quantifying the number of jobs linked to the mohair industry further down the value chain is a difficult task. However, combined with 4 000 – 5 000 on-farm jobs, the rest of the value chain employs around 25 000 job opportunities as listed by Mohair SA.

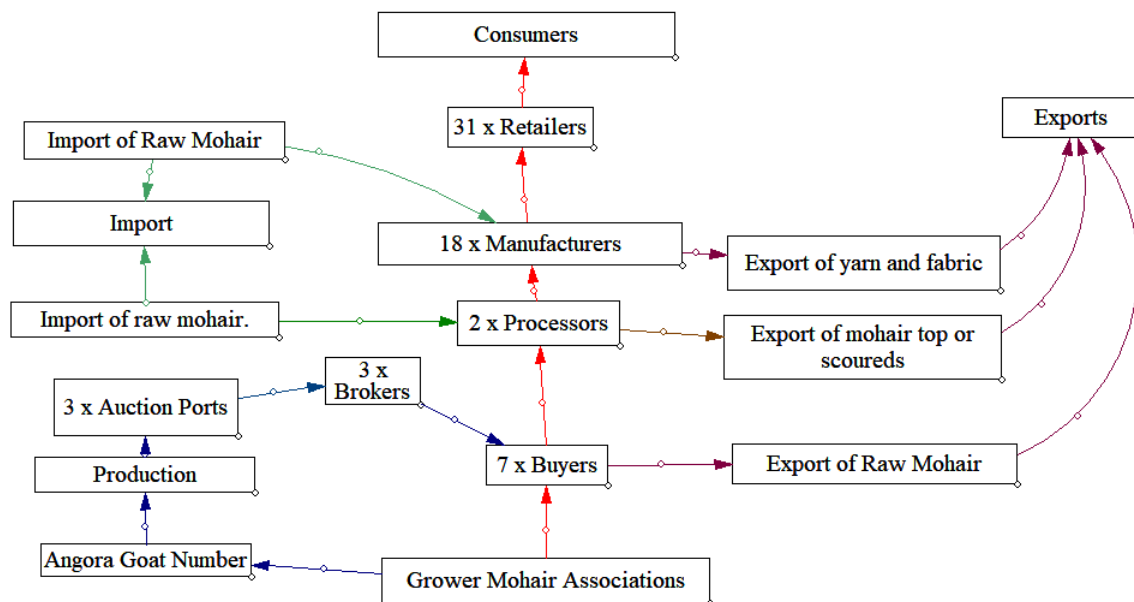
### 3. The Mohair Value Chain

The mohair industry structure, illustrated in Figure 4, is complex and consists of various inter-connected components. The value addition process can broadly be classified into three categories, namely (1) primary sector (e.g. mohair grower associations, angora production) representing farm-level activities, (2) secondary sector (e.g. auction ports, brokers, buyers, exporters, processors and manufactures) representing post farm gate activities that process/prepare farm output for use in markets, and (3) tertiary sector (Retail, Exports, imports) which ensures a stable supply of farm produce to the end user (Consumers).

A broad overview of the value chain is given in Figure 4, indicates that there a few mohair industry associations, 2 processing companies, 18 manufacturers and many retail stores which buy mohair products from the industry. All of these employ multiple individuals to support the economic activities downstream, not to mention input suppliers and technical agricultural services to the industry.

The description of the value chain presented here does not however specify the complexity and difficulty of the process to develop mohair products. The application to select the correct types and levels of processing lubricants and additives to increase friction and cohesion, the use and selection of appropriate processing machines and specific conditions needed to produce a high-quality product makes

this industry very technical. The fact that the country's processing capacity has developed over many decades to reach the current level of competitiveness and performance in international markets shows the complexity and progress within the value-chain. More details on the mohair processing are available from Mohair SA (2018c).



**Figure 4: The mohair value chain in South Africa**

Source: Own Compilation using DAFF, 2016

## 4. Trade Analysis

The global mohair market is one which has been growing over the past decade, not because of increased demand but rather due to a real increase in the price of mohair. South Africa has for years been a key player in mohair markets, growingly as an exporter of combed or carded mohair as the country increasingly becomes a net importer of raw mohair. In this section South Africa's position and performance in global markets are dissected and analysed in detail.

For the purpose of this analysis, HS 510219 ("Fine animal hair, neither carded nor combed (excluding wool and hair of Kashmir "cashmere" goats)") is assumed to represent exports of raw mohair which has not been carded or combed. This is in line with the measurement of mohair exports done by the National Department of Agriculture, Forestry and Fisheries (DAFF, 2016). HS 510539 ("Fine animal hair, carded or combed (excluding wool and hair of Kashmir "cashmere" goats)") is thus assumed to represent exports of carded or combed mohair. It should be noted though that whilst South Africa's exports under this tariff line may be made up all, or at least mostly, of mohair, other countries may export other products. When drawing deductions about the international market, this should be read as the world market

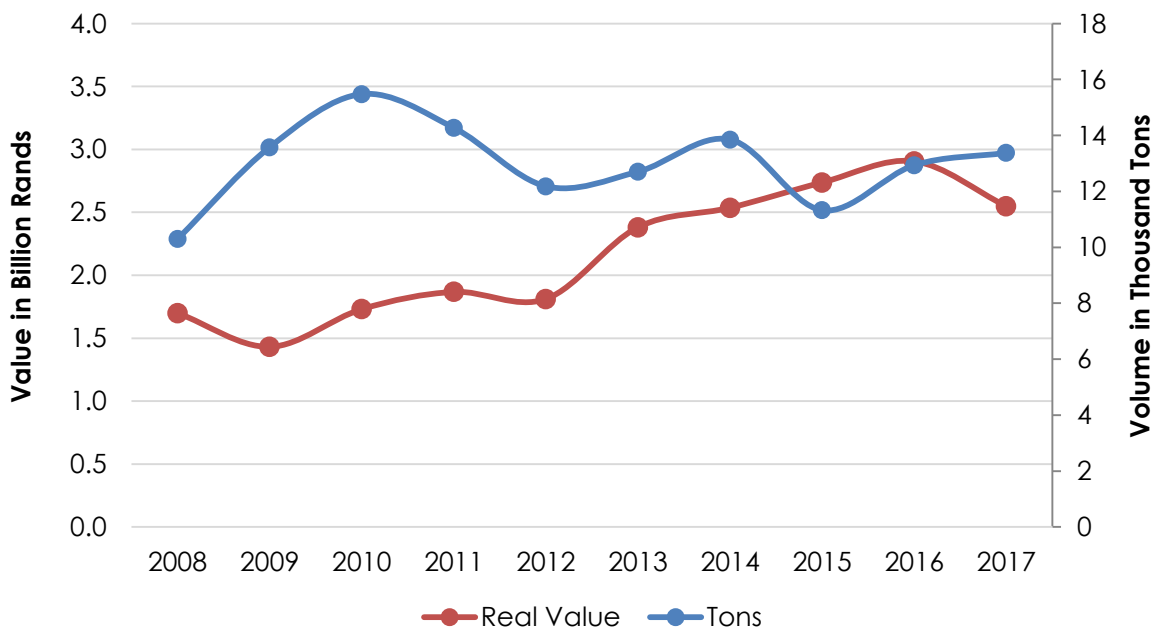


for fine animal hair (excluding wool and cashmere) and the conclusions are therefore indicative more of the broader trends in this product category of which mohair is a key product.

Trade data is sourced from the International Trade Centre (ITC, 2018) and Quantec's (2018) "Easydata" service, which allows for provincial breakdown at the HS6 level. All nominal values are converted to 2017 prices using average consumer price indices from Statistics South Africa (2018).

### 2.4 International Trade in Mohair

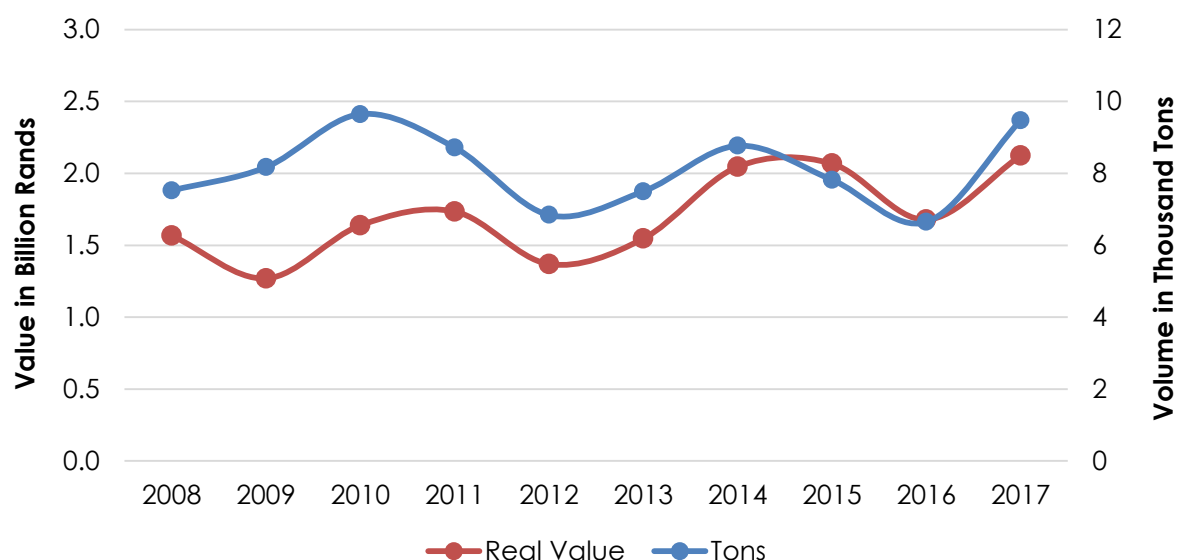
In the past 10 years, the total imported quantity of raw fine animal hair excluding wool and kasmir, shown in Figure 5 below, remained relatively stable. In 2017 total world imports totalled 13.4 thousand tons, up from 10.3 thousand in 2008 but still below the peak of 15.5 thousand tons reached in 2010. The real value of imports, also shown in Figure 1, has exhibited a stronger upward trend than the quantity. The fact that there was a significant value increase without a significant quantity increase shows that the price paid for raw mohair has increased more than South African inflation suggesting increased profitability for South African producers. In 2017 world imports of raw fine animal hair excluding wool and kasmir totalled R2.55 billion, a significant increase from 2008 when they totalled the equivalent of R1.70 billion in 2017 prices, although down from the previous year, 2016, where they equalled the equivalent of R2.91 billion.



**Figure 5: International Imports of Raw Fine Animal Hair (excluding wool and kasmir), 2008-2017**

Source: ITC, 2018 & StatsSA, 2018

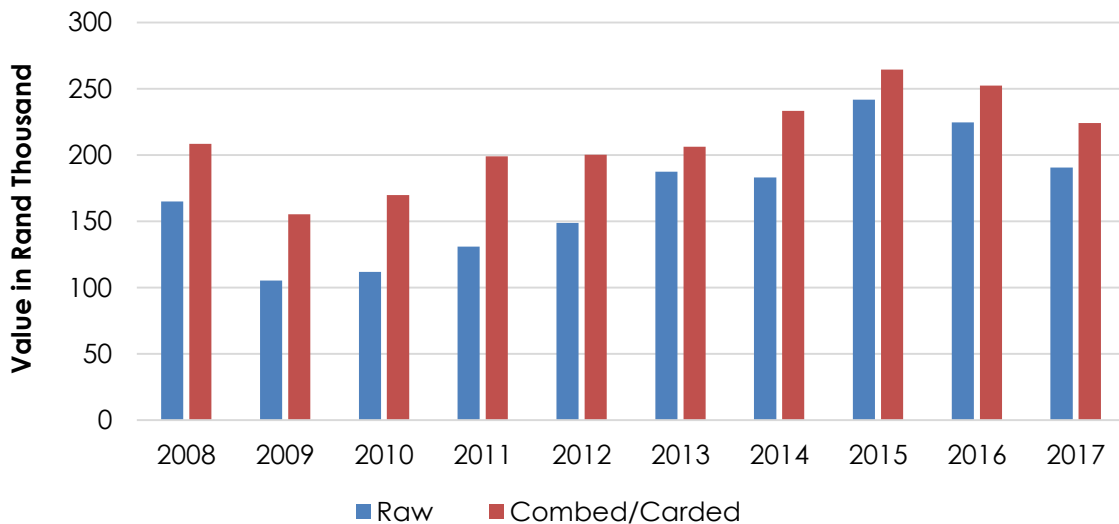
World imports of combed or carded fine animal hair over the past decade, shown in Figure 6, were lower than raw imports and also exhibited a relatively stable level. In 2017 imports totalled R9.5 thousand tons costing R2.12 billion. This is an increase in both quantity and value from 2008 when 7.5 thousand tons were imported at a total value of R1.57 billion. Again the real value increased at a greater rate than import quantities suggesting a price increase in excess of inflation.



**Figure 6: International Imports of Combed or Carded Fine Animal Hair (excluding wool and kasmir), 2008-2017**

Source: ITC, 2018 & StatsSA, 2018

The conclusion from analysing aggregate world trend trends, that there is evidence of real price increases is further confirmed in Figure 6 which shows the world prices of both raw and combed or carded fine animal hair, converted to 2017 prices. There was actually a drop in prices from 2008 to 2009 after which prices increased steadily before falling away for the last two years.

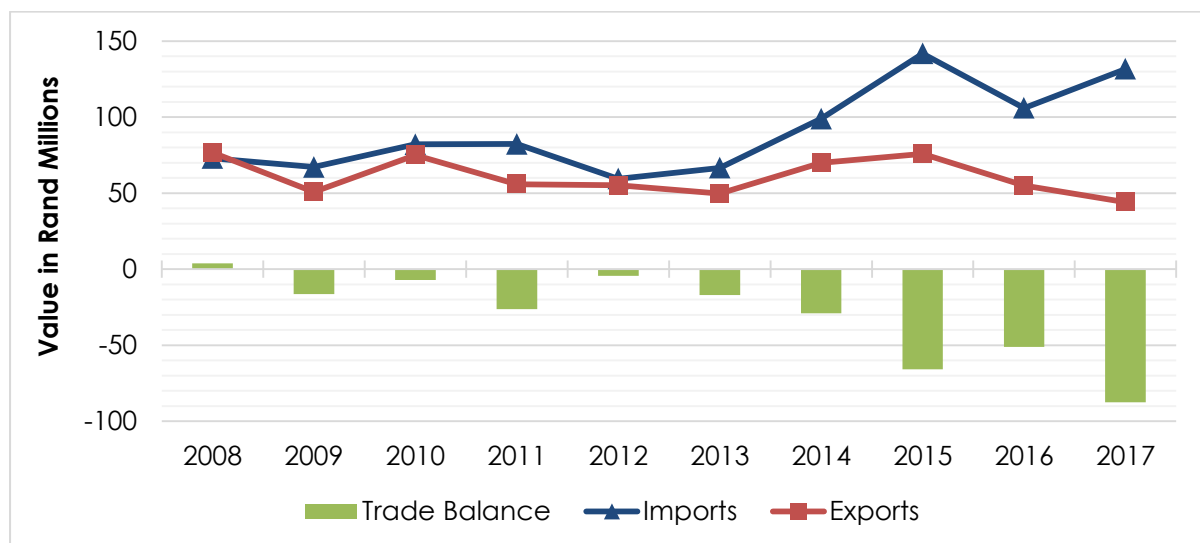


**Figure 7: International Imports of Combed or Carded Fine Animal Hair (excluding wool and kasmir), 2008-2017**

Source: ITC, 2018 & StatsSA, 2018

### 2.5 South African Mohair Trade

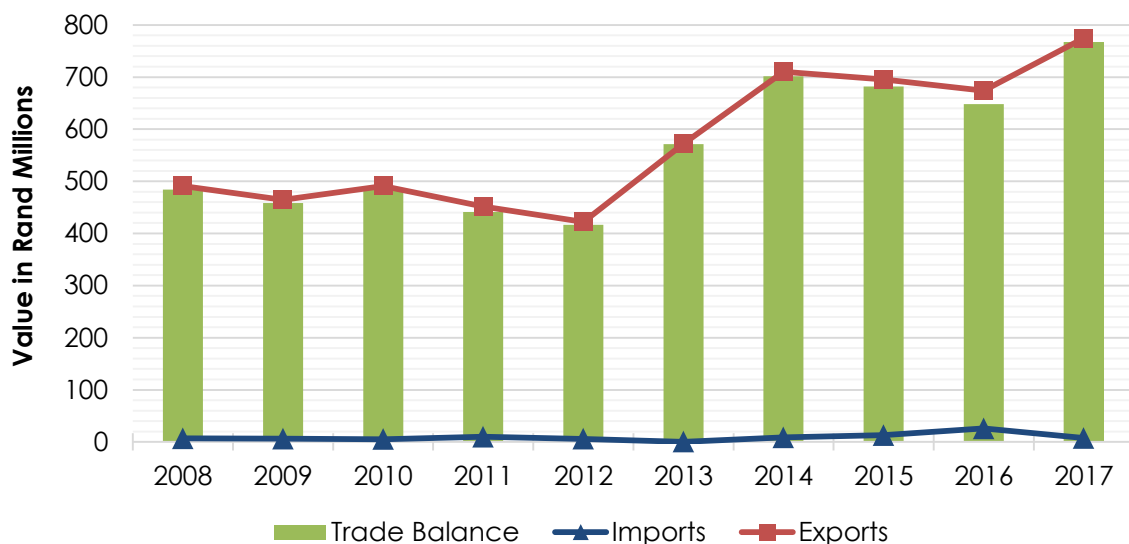
South Africa is a net importer of raw mohair (i.e. not carded or combed). This can be seen in Figure 8 which shows national imports and exports of raw mohair and the resulting trade balance. Between 2008 and 2013 exports remained a little below imports resulting in a slightly negative trade balance. Since 2013 the gap between the two flows has widened, particularly since 2015 when real exports started to decline. In 2017 imports of raw mohair amounted to R132 million whilst exports only amounted to R44 million and hence there was a trade deficit of R87 million. The growing trade deficit in raw mohair is not necessarily a bad thing. Rather than indicating a declining competitiveness for the export of this product, it represents growing capacity in the processing of the raw material into higher value products, which then get re-exported.



**Figure 8: South Africa's Real Trade in Raw Mohair (Not Carded or Combed), 2008-2017**

Source: ITC, 2018 & StatsSA, 2018

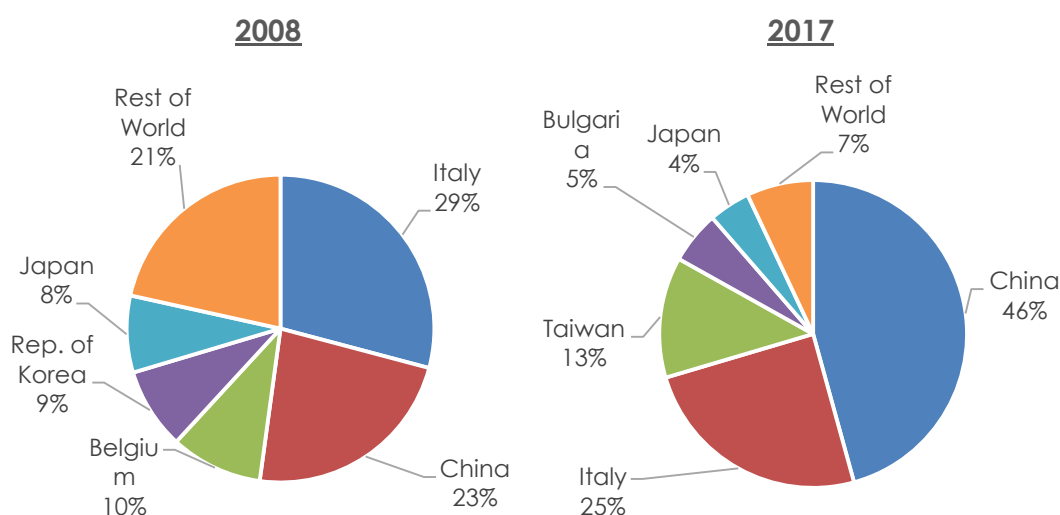
Indeed looking at South Africa's trade in combed or carded mohair, shown in Figure 9 below, there has been a significant rise in South Africa's real exports of this product, with imports remaining at very low levels. In 2017 South Africa exported R774 million worth of combed or carded mohair, with imports as low as R7 million resulting in a R767 million trade surplus. When looking at the main suppliers of raw mohair imported by South Africa it is clear that Lesotho became the biggest supplier, accounting for 43% of imports in 2017 after supplying zero imports in 2008. Back then USA was the biggest supplier accounting for 59% of all imports. USA remains an important supplier, albeit slightly less so, accounting for 40% of the total in 2017. Australia and New Zealand also feature prominently in the top suppliers both in 2008 and 2017 (Quantec, 2018b).



**Figure 9: South Africa's Real Trade in Carded or Combed Mohair, 2008-2017**

Source: ITC, 2018 & StatsSA, 2018

From this point forward, the trade analysis will focus only on the processed mohair exports and the possible impact of market closure on the industry. Figure 10 shows the top destinations for South African combed or carded mohair for 2008 and 2017. Over this period, the share of South Africa's exports going to China rose from 23% to 46%, displacing Italy, whose share fell from 29% to 25%, as the main export destination. Recent times have also seen the emergence of Taiwan as a major export destination for combed or carded mohair from South Africa.



**Figure 10: Top Destinations for South Africa Combed/Carded Mohair Exports, 2008 & 2017**

Source: Quantec, 2018

Finally, looking at average export prices, volumes and values exported, Table 3 and 4 gives an indication of relative trade comparison amongst the leading exporting countries. South Africa clearly realise some of the highest prices amongst competitors in the processed mohair market, with only China getting higher prices per ton. In 2017 South Africa exported 2 494 tons with an average price of R309 985 per ton which is valued at R773 million.

**Table 3: Export Prices of Combed or Carded Fine Animal Hair (excluding wool and kasmir) for Leading Exporters in 2017**

Country	Exports: Quantity (Tons)	Exports: Value (R '000)	Export Price (R / Ton)
Peru	5 078	1 026 833	202 212
China	4 307	2 923 274	678 726
South Africa	2 494	773 103	309 985
Kazakhstan	1 102	4 749	4 309
UK	567	117 447	207 138
Bolivia	450	59 056	131 236
Italy	374	86 715	231 858
Argentina	265	47 827	180 479
Turkey	152	19 823	130 414
Mongolia	105	13 384	127 467

Source: ITC, 2018

In terms of exports of raw mohair, which is not the main target market for South African mohair industry also realise competitive price points with 249 tons sold for around R176 904 per ton. Thus, combined with the value of export for raw mohair,

the total income generated via from foreign trade in the mohair industry was R817 million.

**Table 4: Export Prices of Raw Fine Animal Hair (excluding wool and kasmir) Leading Exporters in 2017**

Country	Exports: Quantity (Tons)	Exports: Value (R '000)	Export Price (R / Ton)
Mongolia	8 359	1 768 538	211 573
Belgium	1 259	71 375	56 692
Lesotho	642	56 621	88 195
Saudi Arabia	527	2 568	4 873
Peru	345	45 965	133 232
USA	291	38 648	132 811
South Africa	249	44 049	176 904
Australia	134	19 597	146 246
UK	132	24 985	189 280
Germany	123	31 171	253 423

Source: ITC, 2018

The trade analysis presented in this section does not venture into analysing provincial trade data for one simple reason; the provincial disaggregation is based on the postal address of the headquarters of the exporting firm. Thus, even though the Western Cape has around 15% of all Angora goats in South Africa, the data suggest that almost no mohair is export from the Western Cape. This is because almost all produce gets exported by companies in the Eastern Cape as the main port is also situated in that province.

## 5. Mohair Industry Sustainable Production Guideline

Mohair SA and the South Africa Mohair Growers Association (SAMGA) in collaboration with other organisations compiled a Sustainable Production Guidelines, which details the industry standards that mohair producers enterprises must comply with to ensure a “bio-diversity-friendly, clean and ethically compliant industry” (SAMGA, 2018). This production guideline also explains in detail the Animal Health and Well-being Principle. According to this guideline, it is mandatory for mohair producer enterprises to ensure that the Angora goats are protected from fear and distress, and the environment is favourable for goats to express their natural behaviour.

Shearing is stressful to goats, but when it is done, the industry production guideline requires mohair producers/farmers to comply with the following;

- Undue handling of goats must be avoided
- Care should be taken not to expose the shorn goats to adverse weather conditions

- Goats should be returned to food and water as soon as possible after shearing
- Where circumstances indicate, shearing cuts should be treated with disinfectants and a fly repellent wound oil to prevent infection.

## 6. Conclusion

This report has set out to understand the mohair industry in South Africa and the Western Cape in response to the recent media coverage of potential animal cruelty claim made by an investigation. As a result of many buyers indicating the possibility of banning mohair products from South Africa, the analysis presented here indicates the possible economic impact for both the nation and the Western Cape were these key markets at risk were to close.

At this point there is no further information available which could point to the extent of market closure due to the PETA investigation. However, based on the analysis presented in this report, the mohair industry's economic footprint is as follows:

**Table 5: Mohair industry economic footprint**

<b>National</b>	<b>Value</b>	<b>Provincial</b>	<b>Value</b>
South African GVA	R354 million	Western Cape GVA	R53 million
Export Revenue	R817 million	Export Revenue	R122 million
Input Linkages	R182 million	Input linkages	R27 million
On-Farm Employment	4000-5000	On-Farm Employment	700-800
Off-farm Employment	25 000	Off-farm Employment	-

*Source: Own Compilation*

In the event of market closure both locally and internationally, the industry is set to lose millions in GVA which will impact all upstream and downstream activities. The industry has a long history of built-up experience and expertise and employs significant amounts of labour across the value chain. On-farm job losses will follow if indeed the market closure forces a decline in production output. The economic impact on the industry and its value chain will depend on the extent of market closure and decisions by major buyers, and will only reflect in the data in the coming months as the situation plays out. Various role players and decision makers will have to ensure they pro-actively engage buyers to re-assure the adherence to the sustainable production guidelines which is crucially important to remain a sustainable farming industry and to stay competitive in world markets.

## 7. Bibliography

AgriStats, 2013. *Livestock Statistics per Region*. Elsenburg: Western Cape Department of Agriculture.

Business Insider South Africa, 2018. *Mohair farmers say Peta misrepresented angora farming in a shock documentary – that could cost South Africa R1.5 billion per year*. [Online] Available at: <https://www.businessinsider.co.za/mohair-farmers-say-peta-dressed-ordinary-agriculture-up-as-cruelty-in-a-shock-documentary-that-is-costing-sa-millions-2018-5> [Accessed 29 May 2015].

Hunter, L., 1993. *Mohair: A review of its properties, processing and applications*. Port Elizabeth: Division of Textile Technology CSIR.

ITC, 2018. *Trademap: Trade Statistics for International Business Development*. [Online] Available at: <http://www.trademap.org/> [Accessed 25 May 2018].

Mohair SA, 2018a. *South Africa Mohair Industry's response to claims of animal abuse*. Port Elizabeth: Mohair South Africa.

Mohair SA, 2018b. *Production information from technical officer*. Port Elizabeth: Mohair South Africa.

Mohair SA, 2018c. *Technical Information*. [Online] Available at: [http://www.mohair.co.za/page/mohair knowledge and information database](http://www.mohair.co.za/page/mohair%20knowledge%20and%20information%20database) [Accessed 30 May 2018].

Quantec, 2018a. *Macroeconomic Service: Agricultural Statistics (DAFF)*. Pretoria: Quantec.

Quantec, 2018b. *Easy Data*. [Online] Available at: [www.easydata.co.za](http://www.easydata.co.za) [Accessed 25 May 2018].

SAMGA, 2018. *Mohair Industry Sustainable Guidelines*. [Online] Available at: <http://www.angoras.co.za/page/sustainable-mohair-production-guidelines> [Accessed 25 May 2018].

Schoeman, S., Cloete, S. & Olivier, J., 2010. Returns on investment in sheep and goat breeding in South Africa. *Livestock Science*, 130, pp.70-82.

StatsSA, 2011. *Population Census of South Africa: 10% Sample*. Pretoria: Statistics South Africa.

StatsSA, 2018. *Consumer Price Index (CPI)*. [Online] Available at: [http://www.statssa.gov.za/?page\\_id=1854&PPN=P0141](http://www.statssa.gov.za/?page_id=1854&PPN=P0141) [Accessed 25 May 2018].

Washington Post, 2018. *H&M, Zara and others ban mohair products after animal cruelty investigation*. [Online] Available at:



[https://www.washingtonpost.com/news/business/wp/2018/05/01/hm-zara-and-others-ban-mohair-products-after-animal-cruelty-investigation/?noredirect=on&utm\\_term=.8c27f23a4e49](https://www.washingtonpost.com/news/business/wp/2018/05/01/hm-zara-and-others-ban-mohair-products-after-animal-cruelty-investigation/?noredirect=on&utm_term=.8c27f23a4e49) [Accessed 29 May 2018].

WCDa, 2013. *Flyover GIS Information*. Elsenburg: Western Cape Department of Agriculture.

WCDa, 2018. *Enterprise Budgets: Beaufort West Mohair farming*. Elsenburg: Agricultural Economics Services Western Cape Department of Agriculture.

**DISCLAIMER:**

*This document and its contents have been compiled by the Western Cape Department of Agriculture, for the purpose of analysing the mohair industry. The views expressed in this document are those of the Western Cape Department of Agriculture unless otherwise stated. Anyone who uses this information does so at his/her own risk. The Western Cape Department of Agriculture or the author(s) therefore, accepts no liability for losses incurred resulting from the use of this information.*