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Draft Position Paper

The potential contribution of EU business in the value chains for wool, mohair and cotton in South Africa

Author: Beni Letebele

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Abbreviations

ACFTA	Africa Continental Free Trade Area
AfDB	African Development Bank
BBBEE	Broad-Based Black Economic Empowerment
CIP	Competitiveness Improvement Programme
CMT	Cut, Make and Trim (Textile Manufacturing)
CTCP	Clothing and Textiles Competitiveness Programme
DBSA	Development Bank of Southern Africa
DTIC	Department of Trade, Industry and Competition
EDSE	Ecosystem Development for Small Enterprise
EIB	European Investment Bank
EU	European Union
GI	Geographic Indicators
IDC	Industrial Development Corporation
IP	Intellectual Property
MVA	Manufacturing Value Added
NEDLAC	National Economic Development and Labour Council
OEM	Original Equipment Manufacturer
PFMA	Public Finance Management Act
PIC	Public Investment Corporation
PIP	Production Incentive Programme
R-CTFL	Retail Clothing, Textiles, Footwear and Leather

SADC	Southern African Development Community
SARS	South African Revenue Services

Executive Summary

This Position Paper, commissioned by the EU-SA Economic Partnership Programme (the Programme), focuses on the potential contribution of EU business in the value chains for wool, mohair and cotton fibres in South Africa, and the reciprocal trade opportunities. Based on an opportunity scan that was conducted as a first phase in this research, the following specific opportunities were identified for deeper analysis in this paper:

1. Large capital investments in spinning mills across all 3 fibres.
2. The integration of new manufacturing capacity (early processing, weaving, knitting, garment making etc.) into existing value chains; including an assessment of the opportunity for circular economy or other sustainability elements.

The paper is based on desktop information, as well as engagements with industry stakeholders in all three value chains, including structures representing the producer bodies.

Main findings

South African **wool** can be positioned as premium quality if the correct early processing capacity is introduced. Significant work has already been done to introduce sustainability and traceability checks, which should enable to industry to secure Fair Trade and potentially Geographic Indication (GI) credentials. Moreover, a recently concluded genetic improvement programme in the Eastern Cape (De Beer, 2018) has benefited more than 40,000 small-scale wool farmers, and improved the quality and value of their output.

The impact of early processing within this sub-sector would benefit multiple downstream and upstream enterprises. Early processing will bring the farmers closer to buyers and processors, improve their understanding of the market and ultimately enahnce the profitability of the industry. To achieve this, will require new investment in early processing capacity. Industry representatives have already identified technology from EU companies, which is preferred for the processing of wool, up to the production of wool tops. Economies of scale for further processing (spinning mills) are not viable at this stage for SA.

South Africa and Lesotho produce more than 70% of the world's output of **mohair**. The properties of mohair are unique (good insulation with flame retardant attributes), however the industry will need to expand volumes to take advantage of any potential industrial application. There is existing capacity to produce mohair tops in South Africa, but it currently operates at less than 50% of installed capacity due to a lack of volume. In the short-term, further efforts are therefore needed to accelerate local breeding programmes, and to explore potential high-value, low volume opportunities for Mohair fiber.

The intervention by government in supporting a cluster programme in **cotton** has contributed significantly to the revival of the sector; agricultural production for cotton has grown more than 800% over the past 6 years. The cotton value chain requires a doubling of the total spinning capacity in the SADC region to take advantage of this additional supply and to support downstream manufacturers. This would entail significant and long-term investments to install new capacity and upgrade existing, aged technology. It is unlikely that any single lending or development finance institution in the region will be able to support such an investment; but it is possible that a combination of funding tools could be used to re-establish a regional spinning network.

Recommendations

The South African wool and cotton industries have undergone a revival over recent years and the potential for the further growth and diversification of these value chains seems possible, with ongoing official support and private sector investment. The opportunities in mohair are unique but the industry will first need to raise volumes significantly, and further research is required.

The Programme is well-positioned to facilitate access to funding for participants in these value chains, while simultaneously supporting linkages with EU industry groups, technologies and markets. This could be achieved through a dedicated advocacy campaign which includes a number of related interventions:

- Sector platforms for manufacturers to engage with potential investors, equipment suppliers and buyers in EU markets.
- Information webinars on what EU investors and development funders are looking for, how to access EU venture capital markets, and how to link local products to EU value chains.
- Information sessions with potential EU investors about prospective opportunities in South Africa's fibre value chains.
- Information sessions for South African suppliers on changes to the regulatory environment, and new trends and technologies, related to the development of sustainable and recyclable fabric in the EU market.
- Business to business engagements which can possibly be facilitated by other EU Programmes, the EU Chamber or trade missions of member countries.
- Research and/or consultations related to the establishment of a Sector Venture Fund to attract capital into the sector, in partnership with existing government programmes.
- A working group with government (that may ultimately extend to other SADC governments) to deepen cooperation with the EU in this sector.

COVID- 19 will have a direct impact on production, investment and trade in this sector. That said, the South African Government has prioritized the preservation of agriculture as a core component of its COVID-19 management strategy, and it will undoubtedly be looking to sustain the gains that it has already achieved in the fibre, clothing and textile industries as part of its recovery programme. There are few other industries in which large number of low-skilled jobs can be created relatively quickly. The weak rand, and a growing imperative for global firms to diversify their supply chains, may provide further stimulus for investment in the sector. In supporting the Government's efforts to grow this sector, the EU would be well-positioned to take advantage of any trade and investment opportunities as they emerge.

1 Introduction

The Clothing and Textile sector has received special attention over the past 15 years from the Department of Trade, Industry and Competition (DTIC) because of the history of the sector, and its significant capacity to generate new jobs.

Between 2007 and 2017, the Industrial Development Corporation (IDC) has invested more than R4,7 billion into revitalising the sector through soft loans and grant programmes (DTIC, 2018), and this has led to the commitments made by the leading retailers to increase local procurement. The Retail-driven Clothing, Textile, Footwear and Leather (R-CTFL) Masterplan has commitments for 2030 from all stakeholders, amongst others to:

- Create at least 60 000 new manufacturing jobs
- Increase local procurement from 44% to 65% of all procurement
- Have government reduce illegal imports and under-invoicing at ports of entry
- Support manufacturers to invest in modernising the productive capacity of the sector (DTIC, 2019)

The EU-SA Economic Partnership Programme (the Programme) has identified the textile manufacturing sector for further study, in order to consider the potential for increased bilateral trade between EU and South Africa, as well as for joint opportunities in SADC. The Programmes interests dovetail with the renewed focus on the sector by South Africa, as articulated in the R-CTFL Masterplan.

1.1 Objectives of the assignment

Natural fibres comprise more than 60% of the textile content sold in SA, with wool and cotton being significant contributors, and mohair being a premium niche product. This study focuses on market opportunities for EU exporters and investors across the value chains of these 3 fibres, and specifically, considers 2 broad categories of opportunity:

1. Opportunity 1: investment in new (or upgrade of existing) and large-scale spinning capacity in South Africa, across all 3 fibres.
2. Opportunity 2: the integration of additional manufacturing capabilities (weaving, knitting, processing) into existing value chains, thereby extending the production capacity of existing operators.

Across both opportunities, the study also seeks to identify possibilities for recycling and sustainable/ ethical practices in the manufacture of clothing and textile products.

The report is structured by fibre type and not according to the 2 categories of opportunities.

The next section reviews some of the external factors that are likely to have a material impact on the growth and development of the clothing and textile sector in South Africa. Many of these factors apply to business broadly but have been selected for their relevance to the study of these fibres and their respective value chains.

2 Impact of External Factors

2.1 Political Factors

- The government has placed a strong focus on job creation and continues to assign resources to sectors that have a high potential for absorbing entry-level or semi-skilled workers. The agricultural sector, alongside the clothing and textiles sector have been earmarked for their ability to meet the government's employment creation objective.
- Government's focus on driving sector plans for key sectors has already seen the release of the Retail-CTFL sector plan. This pact is driven by the retail sector's future commitments but is co-signed by partners in the National Economic Development and Labour Council (NEDLAC).
- The weakened political capacity at the South African Revenue Services (SARS) had created a parallel thriving textiles and clothing market, typified by under-invoicing and false declaration at ports of entry. This has weakened local competitors against illicit importers. This loophole is now being addressed as part of the R-CTFL Masterplan.
- There is additional pressure to ensure energy security to kick-start investment in the manufacturing sector. Moreover, there are some signs of movement following recent announcements relating to state investment in a second power generation company, the authority for large users to generate their own electricity, and the fast-tracking of the renewable energy window. The cost and continuous availability of electricity is a significant factor in the textile value chain, where efficiencies are gained from continuous operations (spinning mills typically run 24 hours for 365 days to recoup investments in a reasonable time).
- The SA imperative of Black Economic Empowerment (BEE) presents an industry hurdle. In the past, there were very few Black participants in the sector at ownership level, and the decline in the sector over the past 20 years has made for a difficult business case to attract Black entrants, primarily due to the perceived risk profile of the sector.

2.2 Economic Factors

- Following two consecutive quarters of negative growth, South Africa has entered its 3rd technical recession since 1994 (Stats SA, 2020). Furthermore, its sovereign credit rating has been downgraded to sub-investment status by all three major ratings agencies (Skenjana, 2020). This means the cost of borrowing, the country's risk profile and availability of institutional investors will impact negatively and supporting the necessary economic growth will be more challenging.
- The capacity to appraise projects for bankability and implementation is found wanting for many government development agencies. Current interventions to build capacity in funding agencies are supported by the EU but results in slow decisions process for potential investment or partnership projects. This has a direct impact on the capacity to bring economic interventions to scale.
- The recent outbreak of the coronavirus has served to further weaken the local economy and its currency, and may realign trade and alliances in multiple ways:

- The handling of the pandemic has shown that there is vulnerability even in stable and developed economies. South Africa at this stage has shown steadfast and auspicious leadership for the immediate term.
- There may be a shift to sourcing from multiple geographies, to mitigate risks inherent with relying on sole supply scenarios.
- The medium-term impact, as a result of the working population in the EU being impacted by the pandemic, may create new opportunities for the profile of a younger working class in Africa, and the capacity for South Africa (or SADC) to build a convincing case for outsourced and contract manufacturing.

- Once international demand recovers, the productive capacity that exists might be able to raise exports on the back of the devalued Rand, but this also makes the import of manufacturing equipment and Intellectual Property (IP) very expensive.
- The liberalisation of trade has led to a surge in cheap textile and clothing imports into the local market. South Africa has reduced protection to the local agricultural or manufacturing sector, and struggles to compete against lower-cost, and in some cases, subsidised exports.
- On the upside, the implementation of advanced and fair labour policies, prohibition of child labour, minimum wage determinations, and the freedom for labour unions to organise; has positioned SA favourably for fair and ethical trade.
- The Rand (together with other emerging market currencies) continues to soften, and potentially positions South Africa as a platform for cheap capital investment, and a viable sourcing destination. There are indications that the long-term development of the East Asian economies and the advent of the African common trading market; African Continental Free Trade Area (AfCFTA), will locate SA as a viable logistics and financial gateway to new sourcing opportunities on the continent.
- In addition to these general impacts, there are also a number of fibre-specific issues of interest:

  For Wool (and mohair)

  - Virtually all wool (in raw form) is exported with pricing indexed on the international price. The lack of local processing capacity means that the sector is largely a price taker.
  - By the 2018/19 production season, SA was producing less than 50% of the wool it produced in the 1990/91 season (Cape Wools SA, 2020), with a significant conversion of capacity to game farming in the Eastern Cape. A study by the World Wildlife Forum (Goldblatt, 2015) suggested that game farming was deemed to be more predictable and profitable for farmers.
  - SA contributes 2% of the world's wool production, the bulk of which is high quality fibre that feeds into niche markets.
  - South Africa and Lesotho produce more than 70% of the world's output of mohair. The properties of mohair have the potential to generate new uses/ applications, but the industry will need to expand volumes to make for feasible new industries from mohair fibre. There is existing capacity to produce mohair tops in South Africa, but it is currently understood to operate at less than 50% of installed capacity due to lack of volume (Russell, 2020). Most of South African mohair is exported to China under license for European retail chains

For Cotton

- The intervention by government in supporting a cluster programme on cotton has contributed significantly to the revival of the cotton sector; where agricultural production for cotton has grown more than 800% over the past 6 years (Cotton SA, 2019). The SA Cotton Cluster programme, which is part of the DTIC's Clothing and Textiles Competitiveness Programme (CTCP) has proven that demand-led interventions (fulfilling retailer demand for specific products) can sustain local value chains and create capacity for competitive exports in the value chain (Cotton SA, 2020).
- Investments in the further processing (ginning) of seed cotton has created capacity to continue growing the commodity.
- The collapse in the international demand and price means that the opportunity to grow local beneficiation becomes strong, although this is countered by the currency collapse that still makes the export market attractive even as raw fibre. In the past quarter, cotton futures have declined from 70US c/lb to 51US c/lb and are not expected to recover to those levels in the next year (CME Group, 2020).
- The drive for local manufacturing to create jobs has been embraced by business but requires a matching investment in the capacity and skills. The capacity is primarily investment in new technology to improve the efficiency and competitiveness of the sector, whilst the skills element is to close the gap created by the collapse of the sector value chain, where there has been no trade skills development for textile and garment machinists, artisans, millwrights and fabric technologists.
- Specific bottlenecks in spinning (and yarn varieties) have been identified and are part of the focus areas in this business case.

2.3 Social Factors

- The age demographic for SA and the region broadly is increasingly young, and therefore responsive to international trends in clothing, which will mean the acceleration of fast fashion, shorter life cycles and increased demand.
- The economic downturn will keep imports of cheap clothing flowing, for as long as SA does not build a "Quick Response" model that can make local production trendy and current.
- The production of wool and mohair has benefitted from empowerment programmes aimed at uplifting poor rural communities through improving their herds and giving them improved access to market. These programmes are key to increasing the local output of wool to reach the critical volumes that are needed to justify capital investment for local processing.
- The impact of Covid-19 Corona virus may have the following effects on clothing and textile value chains:
  - Markets reliant on Chinese imports will experience a temporary decline in output, which will disrupt supply and open considerations for a diversified supply geography.
  - The virus will have a detrimental impact in least developed countries with poor health systems as a result of weakened social and economic infrastructure - particularly Africa. The most vulnerable will be the poor, individuals with underlying medical conditions and the aged.

- The working population will be affected by high absenteeism, and companies by poor productivity.
- The exponential increase in new infections will make for insular economies where the focus will revert to how to cater for own requirements. The use of cotton in the medical field is widespread (protective wear, bed sheets, doctors clothing etc.) and may ignite a special dispensation to create new capacity to service the needs of the public sector from within the country.

2.4 Technological Factors

- The EU is a leading provider of technology and innovation in this sector, its companies are often copied and replicated. The EU remains an important reference point for many SA companies in textiles.
- Fibre processing has historically relied on large capital investment, but innovations are migrating towards smaller installations, with shorter production runs, creating niche or specialised fabrics. Countries and companies that can create agility in this market will gain advantage.
- The capacity to produce blended yarns with new properties (light weight, breathability, comfort) is important, but may be out of reach for manufacturers in South Africa if the key component for such blends are synthetic fibres, as these are all mostly imported.
- The focus on natural fibres (and the opportunity to develop new blends and variants) can spur development of new fabric textures, although this requires significant investment in research, or meaningful partnerships with leading technology developers.

2.5 Legal Factors

- Textiles are a designated sector by the SA government. This means the Public Finance Management Act (PFMA) stipulates that the purchase of all clothing and textiles with public funds should be 100% local, unless exemption is granted by the DTIC.
- Whilst this designation has been difficult to enforce or monitor, it creates the opportunity for the manufacturing of specific products with a captive market (such as linen for hospitals, police and SANDF uniforms, etc.).
- SA has a legal framework in place that protects intellectual property for investors bringing their expertise into the market or signing licensing agreements with local companies. There is also an increased clean-up of counterfeit goods, linked to the re-establishment of capacity in law enforcement and SARS.

2.6 Environmental Factors

- The increasing awareness of the negative externalities caused by plastic use will begin to include polyester fabrics. This will increase the affinity to natural fibres and grow demand.
- There is little or no fabric recycling in SA, and this will become an important factor in the consumer decision matrix.

- The adoption of responsible production standards by both the wool and cotton industries in SA is a positive development, and SA's wool producers have implemented leading responsible farming standards.
- The local mohair industry has installed a process to regain its reputation after a damaging exposé on the treatment of angora goats during the shearing process. A video by People for the ethical Treatment of Animals (PETA) (Harrison & Caboz, 2018) has accelerated the development and adoption of sustainable practices and standards by the mohair industry, where the industry has piloted the implementation of Responsible Mohair Standards (Mohair SA, 2019)

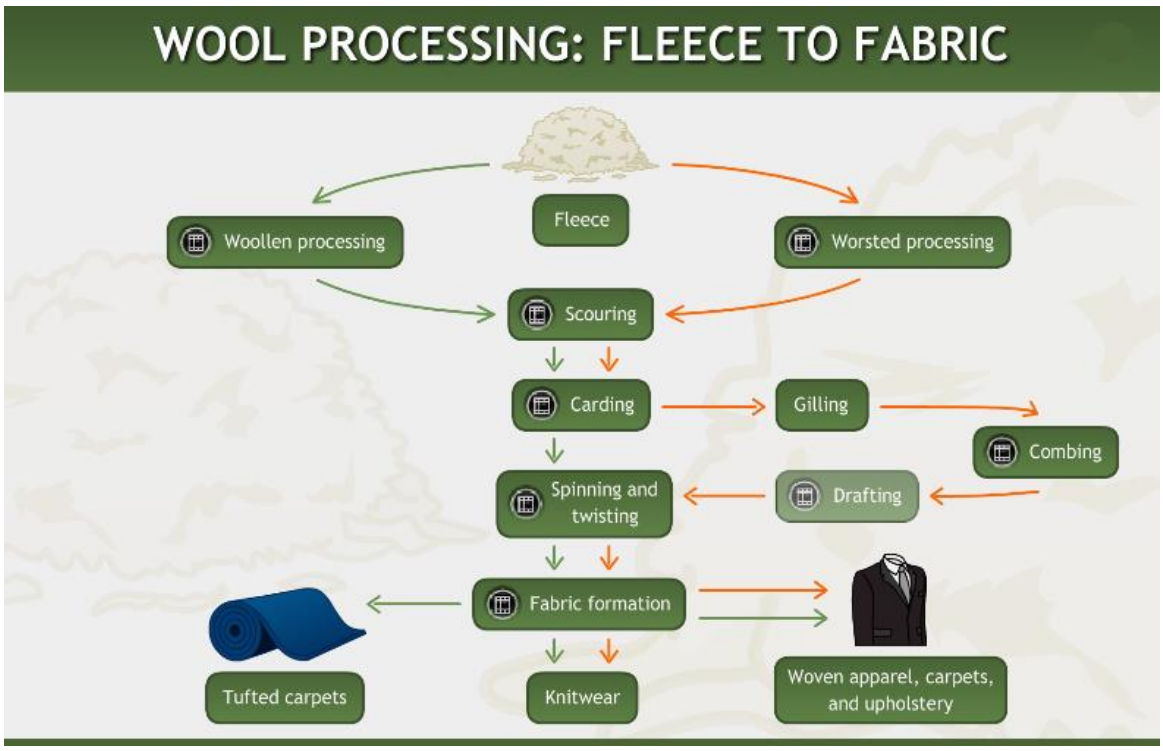
3 Potential Opportunities in the South African Wool Market

3.1 Market Overview

In 2018, wool accounted for 4% of the value of SA's agricultural exports, at R6,4 billion (Sihlobo, 2019). South Africa produces more than 45 000 tons of wool per year, and exports more than 75% of it with no processing.

The processing capacity (see Figure 1 below) (University of Waikato, 2017) between the fleece (raw material) and fabric (garment input) has been consolidated in China for mass output at competitive prices. Buyers for EU companies from the South African wool supply auctions ordinarily channel their purchases to Chinese converters, and the fabrics are supplied to manufacturers closer to the design houses in Europe.

Figure 1: **Error! Bookmark not defined.**



The key steps in the wool manufacturing process are primarily:

The cleaning of the wool fleece (scouring) to wash out oils, sweat and particulate material;

The carding of the wool fibre to straighten the fibres to being parallel; and

Combing the wool to remove any remnant debris, as well as to remove the short fibres to improve the quality of the wool.

The combed wool is then ready to be spun into yarn, where the properties of the yarn are determined by the end use (clothing, carpets etc).

This business model is being challenged by the demand for specialised fabrics with short production runs, on a quick response model. This means more design houses in the EU are bringing yarns back for production of specialised fabrics, and there is an increasing demand for new blends of yarns (both natural and synthetic) to meet new market trends.

South Africa also has a strong design industry, which currently converts the worsted (good quality) fibre into fashion apparel, but virtually all the fabric is imported. This gap in the value chain offers a potential opportunity for collaboration and investment.

3.2 Increasing Wool Output

SA has run very successful programmes to increase the output of wool, particularly from small-scale farmers in rural communities. This has been through the Department of Rural Development and Land Reform's genetic improvement programme (GIP) which was implemented by the National Wool Growers Association (NWGA) to introduce more than 45 000 breeding rams into flocks, to improve both the shearing volume per sheep as well as the quality of the fibre (De Beer, 2018).

This programme has seen an increase over 20 years (1998 to 2018) of fibre purchased from small-scale farmers, from R1,5 million to R383 million, with more than 9 000 new jobs created. The GIP also helped to set up shearing and sorting infrastructure in communities, and this has eliminated a large part of the informal trading of wool, where rural farmers were typically receiving less than 20% of the value of their produce.

At the same time, a significant share of the volume was lost from commercial farmers, mainly from the conversion of many sheep farms to game farming. This means that output has remained stagnant at 48 000 tons per annum sold, compared to a high of 101 000 tons in 1990 (Cape Wools SA, 2020). The current output accounts for 2% of world wool production and the country would need to build back to the volumes recorded in the early 1990s in order to re-establish the full value chain.

The build-up of this productive capacity is a long-term project involving a continuous monitoring process of many small-scale farmers in multiple communities. Whilst it is a necessary intervention, there are already structures in place to support it, if it is capitalised properly.

3.3 Investing in Processing Capacity- Greasy Wool to Tops

The decline in output has also reduced investment in processing capability, and much of the required capital for new technology has been redirected out of wool farming, as indicated earlier. There have been attempts to attract both local and foreign investment or partnerships into raising the processing capacity for wool.

Figure 2 below is an image of a wool top; the final product after the process of cleaning, straightening and separating short from long fibres. These are thick slivers of parallel fibres that are ready to be spun into various types of yarn. The scale of Chinese operations for yarn spinning compared to the rest of the world means that even with a large capital investment, the local industry would not be able to develop the economies of scale needed to compete in spinning (yarn production).

Figure 2: Wool Top- with fibres that have been cleaned and combed[1]. The local industry believes there is a viable business case for the processing of wool up to the point of top production.

The opportunity to produce wool tops, however, is attractive and feasible for the local market. It also has the potential to open the downstream manufacturing which currently relies on imported tops. Moreover, because of the current auction license structure for local wool, there is a good understanding of the market potential for local processing, and how the local product might be differentiated.

3.4 Market Opportunity

The Product: The quality of the local fibre is well recognized, but because it is mass processed in China, it is not differentiated. Production of local wool tops creates a direct market, particularly to high-end EU design houses for which the product quality consistency, reliability of supply, and sustainable manufacturing practices can be offered. Whilst a significant portion of the raw fibre would still be exported for Chinese processing, local top production would improve the availability of raw materials for local downstream manufacturing and allow for a select range of quality tops to be tailored for specific markets.

The Potential Clients: There is a strong uptake of fibre by EU manufacturers currently, and the creation of a branded quality wool top would allow for increased reach to other brands. The current trend of the visibility of the value chain means that the clients are more likely to be the retail brands than just the yarn manufacturers. This improves the opportunity for long-term trade as the local fibre can become part of the sustainability story that the brand can develop.

Investment and Trade Partnerships: The industry is open to a range of options on how to create the required capacity, but all of them require investment partnerships. Because the focus has been on interventions for the sector (as opposed to an individual enterprise); the partnerships would require engagement with multiple stakeholders, which the Programme is well positioned to facilitate. Several avenues may be considered, namely the facilitation of:

- Local sector industry bodies' forum on finance and funding options, to include commercial and development banks' participation
- EU manufacturers' consideration of local investment partnerships, creating an opportunity for investment in processing infrastructure to secure reliable fibre supply

[1] Stock Image; courtesy of http://www.origtex.com/wool-tops/

- Equipment Manufacturers' re-entry into the local manufacturing market, to establish operations or agencies that ensure maintenance support, artisan training, and availability of spare parts
- Long-term off-take agreements with leading brands, for local wool tops (with sustainability certification) to enter specific value chains
- Growth strategies to increase participation of local farmer communities in the long-term development of local beneficiation, through directing SMME investment into existing value chains.

The wool producer community has positioned itself well to capitalize on potential market opportunities, however there is potential for this Programme to assist the wool producer community to better leverage the following attributes of the sector:

- **Well- organized Sub-sector.** There is a strong industry body for wool in SA, which looks after respective interest groups along the value chain such as breeders, wool farmers, small-scale farmers, shearing services, purchasing and exports. These are organized as functioning affiliates of Cape Wools SA. This creates a unitary point of engagement for development projects, without the risk of multiple conflicting interests.
- **Market Positioning and Recognition.** South Africa is known to produce high quality merino wool as its main output, even though all of it is sold on auction into a processing pool. Buyers for the international market purchase from the monthly auction held in Port Elizabeth, and more than 60% local wool is from merino breeds, whose fleece attract a premium of up to 40% on other breeds (Cape Wools SA, 2019). The weakening of the Rand creates incentives to export raw product for a quick return, but there is an understanding that the bigger opportunity is through capitalising on the recognised quality of the fibre.
- **Differentiation.** Cape Wools SA has led the international efforts for producing standards for sustainable wool production, with an emphasis on the sensitive area of animal welfare. The product also complies with many of the elements of Fair and Ethical trade, which are receiving significant attention in the EU. The wool therefore has traceability up to the auction floor and can be verified to comply with sustainable production standards. The only way to accrue direct benefits from this differentiator is if the wool is processed up to top production stage locally, where it can then be marketed to spinners internationally on the strength of this differentiation.
- **Niche Markets**. All wool qualities will have a use and application, from carpets to fine apparel. An auction sale means your product has been graded as bulk, but not for its other attributes. Through the commissioning of a focused market study to align a specific grade of tops to a targeted audience; the output can be matched to a niche market to capitalize on high margins. The local producers have already positioned the wool output for branding with the Geographic Indication (GI) as Cape Wools SA.

3.5 Specific Opportunities for EU Cooperation and Investment

Based on the above assessment, and discussions with Cape Wools South Africa, there are immediate opportunities to invest in the local processing of greasy (raw) wool up to the stage of the production of tops. A facility established for this purpose may create the necessary market linkages to the EU for local producers. Such a facility could manufacture tops for a niche market that is looking for high quality fibre for high-end apparel; a sustainable and traceable product offering that is compliant with Fair Trade principles, under the Cape Wools trademark brand which

is associated with distinguished quality. There are a number of ways in which the EU could potentially support, and benefit, from the development of such a facility in South Africa; namely:

- **Promote Development Funding Opportunities.** EU development funding agencies may have an interest in directing investments to this industry but lack a designated entry-point to the market. A business proposal has already been prepared by Cape Wools for an initial R95 million project. Funding for this project would need to be secured from investors amenable to extending softer financing terms; as the project would need to accommodate initial development aspects which would translate into tangible business prospects in the medium- to long-term. The planned production is fully subscribed by both the local and international market who will offer pre-orders for the output, and the scale of the operation is constrained only by the capital that can be raised. Further scaling up would require significantly more funding.
- **Sourcing of Sustainable and Specialist Products**. From a GI perspective, Cape Wools products would be targeted at EU retail brands. For these brands, access to a unique, sustainable and traceable high-quality wool source could provide them with a competitive advantage further up the value-chain. This could be facilitated by hosting brand delegations in South Africa – to review and advise on standards; and to receive early market information and access to inputs.
- **Supply of New Technology and Equipment.** As indicated earlier, EU technology is already well-respected in the domestic market, and the leading contenders for the initial Cape Wools project are EU companies. A study tour to visit European equipment suppliers might be useful for both industries.
- **Upskilling of Local Capacity.** The establishment and scaling up of the industry will need to be accompanied by significant skills development. There may be further opportunities for skills and technology transfer from the EU.

3.6 Possible Interested Parties

This is a quick-win opportunity that could be implemented with support from a limited number of interested parties:

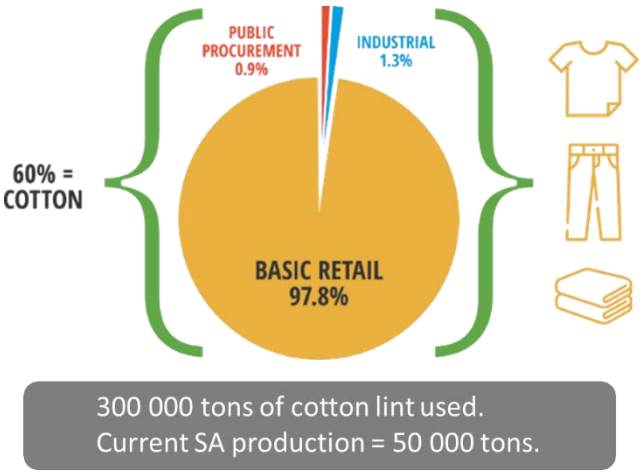
- Cape Wools: Project proposer
- EU-South Africa (EU-SA) Partners for Growth: Inward and outward study tours
- EIB, EU-member states' agencies, EU Development Programmes: Project funding and technical assistance
- EU Manufacturers: Technology and equipment suppliers
- Department of Trade and Industry: The Clothing and Textiles Competitiveness Programme can offer supplementary funding to the Programme. Any grant funding from the DTIC would be directed at improving the compliance of small-scale farmers to benefit from a secure market and create sustainable employment through SME development.

4 Potential Opportunities in the South African Cotton Market

4.1 Market Overview

The Cotton value chain remains core to textile value chains internationally, with cotton representing more than 60% of fibre content in apparel and home textiles. In South Africa, the annual consumption of cotton exceeds production 6-fold, and there is therefore significant local demand to absorb any further increase in competitive production. It is worth noting that although wool represents 1% of local fibre content, participants in the wool sub-sector believe this could turn around significantly if there was sufficient processing to generate the yarns and fibres for local manufacture (as discussed in Section 3).

Figure 3: South African Fibre Market



Fibre content	%
Cotton	60.5%
Polyester	29.8%
Nylon	5.3%
Other	3.2%
Wool	1.0%
Acrylic	0.2%

(The Moss Group, 2015)

The beneficiation of cotton involves a series of industrial sub-sectors, as illustrated in Figure 4 below. The basic steps of the local cotton value chain are as follows:

- Farmers produce seed cotton, planted in October and harvested in May, with yields ranging from 1 ton/hectare without irrigation to 6 tons/hectare under irrigation.
- The ginning process separates the fibre from the cotton seed. The fibre is graded and baled for use in textiles, and the nutrient-rich seed is sold as cattle feed.
- The fibre is spun into different types of yarn, depending on end-use and market demand, from where it is either knitted or woven into fabric (either as pure cotton or blended with other types of fibres)
- These fabrics enter the Cut, Make and Trim (CMT) operations that make garments for the retail space.

Figure 4: The cotton value chain, from cotton farm to the garment in store.

(The Moss Group, 2014)

The South African cotton value chain has experienced severe disruption over the last few decades, mainly due to competitive imports from China. Specifically, because many of the manufacturers were not vertically integrated, a loss of capacity in the middle of the value chain has led to a decline in demand for local fibers; and in the end, it became simpler and more cost-effective for retailers to establish buying offices in the East in order to secure most of their merchandise. The remaining local capacity was largely used to manage short-runs of basic products.

This situation has changed markedly in recent years. The intervention of government in the Clothing, Textiles, Footwear and Leather (CTFL) sector through production and infrastructure grants has re-ignited the cotton value chain. Specifically, the DTIC grants of more than R4,7 billion over the past 12 years has stemmed job losses and factory closures throughout the sector (DTIC, 2018).

In cotton farming specifically, the rapid increase in production from 5,000 tons of fibre in 2014 to 49,000 tons in 2019 has given impetus for continued intervention and created opportunity for new partnerships (Cotton SA, 2019). The DTIC's CTCP programme has been extended to complement the Masterplan 2030, to encourage new cluster interventions.

Although government instituted a localisation programme that required 100% of public sector textile procurement to be locally manufactured, a study for SA Cotton Cluster (The Moss Group, 2015) determined that government procurement formed less than 2% of annual consumption. The focus of the recovery strategy therefore moved to partnerships with the retail sector for local procurement. Supported by research, technology demonstration, annual retail volume commitments, and upfront value chain contracting, new investments in the first level of processing (ginning) have now created opportunities for the re-establishment of increased spinning capacity.

4.2 Investing in Cotton Spinning

Over the past 15 years, South African spinning capacity declined from 23 operations to 4. The remaining 4 operations have different focus areas that are coincidentally complementary:

- Prilla 2000 (operates in Pietermaritzburg, KZN) only spins cotton yarns, in both open-end and ring-spun formats to supply mostly to the fabric knitting sector.
- Tai Yuen (operates in Mooi river, KZN) spins cotton, polyester/cotton blends, as well as other fibre blends.
- Tradelink (based in George, Western Cape) is a vertically- integrated operation, with open-end cotton spinning only for their own use in knitting and garment manufacturing.
- Standerton Mills (in Standerton, Mpumalanga) produces industrial yarns and fabrics (including conveyor belts, mop heads) which use mostly coarse cotton fibres.

In addition, there is significant reliance by South African retailers on the supply of yarns, fabrics and garments from operations in Lesotho, Botswana, Mozambique and as far as Tanzania, which are considered as 'local sourcing' by many retailers.

To take advantage of the additional production of cotton fibres within South Africa and to re-establish an integrated domestic value change, additional spinning capacity is required. There are a number of factors to consider when determining the viability of new (or upgrading) spinning operations:

- **Dependency on Quality of Input Fibres:** Spinning is the conversion of fibre to yarn, which is further woven or knitted into fabric. The fibre is drawn and paralleled into slivers, which are further drawn to a thin yarn, and twisted to give the yarn strength. The quality of the fibre from the ginnery influences the quality, efficiency and productivity of the mill.

  A key part of the success of the SA Cotton Cluster's value chain programme was the opportunity for the spinning mills to select cotton lint bales for a specific application or end-product. This meant that mills received a lab report for each bale of lint available, so that they could select bales based on the suitability of the fibre for the end-product. This also meant that the cotton fibre output had to increase well above the spinning capacity, to create the opportunity to be able to select for suitability, as opposed to using whatever was received.

  South African fibre is mostly grown under irrigation conditions and is recognized for its quality. The scaling up of fibre production creates the right opportunity for upgrading the spinning capacity locally.

- **Product Selection:** There are multiple combinations which influence the decision on the spinning mill installation, but the key determinant is market demand for specific yarns:
  - Spinning mills can be dedicated to a single type of fibre, such as cotton, and may produce a coarse or fine yarn depending on the spinning method (open-end or ring-spun) and fibre available to it. These mills will not allow contamination of other fibres and would be set up specifically for the specific yarn output.
  - Mills can produce blended yarns, where they twist together combinations of yarns to give a specified mix (e.g make polycotton yarn from polyester and cotton blend- 50:50; 70:30, etc.).

A blended yarn may require a 2-stage dyeing process to produce a consistent fabric finish (because of different dye absorption properties).

- A dedicated mill in a vertically integrated operation will have its output determined by the products being manufactured. These mills would often produce in batches suitable for the order process.

- **Market Demand:** South Africa has a total spinning capacity of just more than 10% of the country's retail consumption of 300,000 tons. This climbs to 18% when you include capacity in Lesotho, eSwatini, Mozambique and Zimbabwe, although most of this additional capacity is either export oriented (AGOA focus for Lesotho, captive market in Portugal for the Mozambican spinners), or is dysfunctional (fire damage in eSwatini; Foreign currency restrictions in Zimbabwe).

  The common denominator is that the resurgence of cotton production in the region has not been matched by the required upgrade in spinning mill modernisation and technology. This means that most of the cotton lint is exported without further processing and limits the opportunity for upstream production.

  Apart from a regional distribution (across SADC) of spinning operations, there is also a wide array of yarn types produced by the various spinners. This means that a regional development strategy to uplift manufacturing output is unlikely to lead to excess supply of any specific product; rather, existing, and new spinning mills can complement each other to service distinct market segments.

  Individual mills can also be profiled to ensure a best fit for local cotton fibre production. For example, an increasing proportion (now at 74%) of South African fibre is produced from irrigated farmlands (Cotton SA, 2020), which generally yield a longer staple fibre suitable for fine yarns and garments. The installation of a mill for ring-spun yarns in South Africa would suit both market demand as well as the profile of fibre being produced.

Based on this preliminary assessment, it would therefore appear that South Africa now has the volume and quality of fibre inputs, as well as sufficient domestic demand, to invest in increased spinning capacity. The South African Government has already invested significant capital in this sector – with apparent success – the opportunity might now be ripe for new funders to consider opportunities to enter this potential growth industry.

4.3 Developing an Alternative Funding Model

Cotton spinning mills are capital intensive, with a greenfield operation requiring over R500m investment. The decline in the sector has made this type of investment difficult for potential manufacturers and would likely require some form of funding syndication.

The Industrial Development Corporation (IDC) has stepped in to save jobs in the sector over the past 2 decades. These interventions make the IDC the single largest investor in R-CTFL, and there is no published exit strategy to re-privatise recovered entities. Thus, despite its industrial development mandate, the IDC is currently constrained by its exposure to this specific sector.

Similarly, the Government's existing manufacturing incentive schemes are limited in quantum and cannot cater for large-scale projects. The DTIC's Production Incentive Programme (PIP) offers a grant of 7,5% of manufacturing value added (MVA) per enterprise per annum, which allows for systems, equipment and productivity upgrades for SMEs.

Further access to public and development funding is largely linked to participation of Black South Africans through the Black Economic Empowerment legislation. The legislation has a dampening effect on foreign investment, as it is neither well understood nor clearly articulated for potential investors. There is also poor historical participation by Black South Africans in the ownership of clothing and textiles manufacturing companies. Thus, while the participation of Black investors may be critical in releasing further public funds, it may be difficult to attract Black investors to this sector.

To secure an investment of any meaningful size, the sector would need to look to other development funding partners. Here, the EU may be in a unique position to broker collaboration between development funders on both continents, where funding can be syndicated (African Development Bank, European Investment Bank) for the broader benefit of equipment suppliers in the EU, and enterprises looking for capital. Based on discussions with industry role-players, such a funding arrangement might include the following features:

- A Sector Investment Fund led by a South African-based Development or Investment House could be established with syndicated Development Funding between African and European Development Funders for the recapitalisation of spinning mills across the region. There is potentially sufficient demand from current industry players in the region for up to €200 million in soft loans over 10 years, with the principal purpose of upgrading the region's spinning capacity and unlocking the market for the further processing of yarns (knitting, weaving operations etc.).
- The local retail sector, as part of their commitment to the Retail-CTFL Masterplan, could make offtake pledges against the anticipated output from these new investments. Some of these discussions (between retailers and development funding institutions) are already taking place, albeit in an uncoordinated manner.
- Institutions like the Public Investment Corporation (PIC) could invest as a proxy if needed to provide for localization or BEE requirements. This would unlock the opportunity for operators and entrepreneurs to engage the Fund without first having to find a BEE partner.
- The Fund may impose specific qualifying requirements on borrowers to augment the benefits of the partnership and ensure that the loans support wider public interests:
  - Research and Development support for new products and fabrications, in partnership with local product design houses.
  - Creation of Maintenance and Technical skills hubs in which the selected equipment supplier commits to training programmes to support the new technology, including exchange programmes.
  - Support for product development for entrepreneurs looking for downstream opportunities.

4.4 Possible Interested Parties

This opportunity is still at an early concept stage, and further and lengthy engagements would clearly be needed amongst all role-players to discuss the merits and structure of any such funding arrangement. The main players, and possible next steps, are outlined below.

Development Funders: The AfDB, DBSA, EIB, as well as EU-member states' agencies

Institutional Investors: The PIC

Key Retailers:	Local chains, who have pledged to increase local sourcing from 44% to 65% as part of the R-CTFL Masterplan EU chains with a local footprint, as well as those looking for new sourcing destinations
EU Manufacturers:	CEMATEX represents the textile machinery manufacturers/ associations from 9 European states. They explain one of their key roles as being to keep in touch with EU officials (Cematex, 2020). Their members and other companies would bid competitively to be partners for the Programme.
Local Manufacturers:	Participation of current mill operators, who are looking for large capital support to become competitive.
Masterplan Team:	The Executive Oversight Committee for the R-CTFL Masterplan is the key stakeholder representing a broader industry (but focused on the clothing and textiles sector).

4.5 Possible Next Steps

To develop this concept further, a four-stage process is envisaged as follows:

1. Advocacy and positioning (year 1): mobilising role players, resources and scoping of the project. This will also involve consultations with government in South Africa and potentially the region on enabling policies, and on agreeing on the intent of the project. In the first instance, the EU-South Africa (EU-SA) Partners for Growth Programme could facilitate a workshop between industry and government stakeholders in the region, with funding and technical experts from the EU.
2. Planning and bids (years 2-3): as a regional (SADC) programme, it will take time to structure and roll-out the Programme across multiple jurisdictions.
3. Investment roll out (years 2-6): at best, actual investment could begin within a few years, depending on the structure of the fund and prevailing market conditions.
4. Competitiveness enhancement (years 6-10): an exit strategy should be devised which encourages investors to explore new markets and opportunities and attract resources from outside of the development fund.

5 Additional Opportunities from Expanding Cotton Manufacturing

As discussed above, the progress made by the SA Cotton Cluster to develop local value chains has shown the absence of regional spinning capacity to be a pressing bottleneck, but it has also highlighted a number of additional opportunities in this sector for significant increases in trade in both directions. There are also discussions between SA and EU enterprises for the production of various products under license from EU fabric technology specialists, particularly in the area of home textiles (carpets, furniture fabric, etc.). The nature and rationale for some of these additional opportunities are summarized below:

- **Local Focus:** The aim of the South African Cotton Cluster was to increase local production for local retailers, in line with the latter's commitment to purchase locally made products. There is similarly an untapped opportunity for overseas brands to identify local CMTs to work with in developing supply chains.

- **Off-Season Trading:** The Northern summer peak production period coincides with the lower output period for South African garment manufacturers, presenting an opportunity to shift production to South Africa. The mapping of available capacity in South Africa, to EU summer demand, may help to link European brands with requirements for quick response models to available capacity.

- **Decentralized Sourcing:**The current Covid-19 pandemic has raised questions about the dependence of firms on a single market for the sourcing of specific product. Specifically, the concentration of supply in China has created challenges for the production and movement of goods internationally, and looking forward, companies are likely to look at alternative markets for both the procurement and sale of their goods. The weakening of the Rand over the last few months might make the South African market increasingly attractive, though significant investment in capacity and technology to produce the new type of fabrics sought in the advanced economies will be required.

- **Virtual Value Chains:** The expansion of manufacturing does not always require a start-to-end model within the local economy. For example, mills in Mauritius have contracts to provide fabric to EU brands. Whilst this does not expand the local manufacturing base, they source local fibre on contract because of the known quality and the competitive price and sustains agricultural jobs in the local economy. If sufficient spinning capacity can be established in South Africa, similar opportunities may emerge.

The information gathering sessions (for this project) indicated there are many significant interactions taking place between South African manufacturers and potential EU suppliers. These interactions are mainly at the level of trade enquiries for equipment through local agents or through past linkages to suppliers.

The current interactions do not generally provide exposure to options of other manufacturers available in the EU market and are not structured to open opportunities for potential EU investment. There is a poor culture locally of fund-raising through venture capital and angel investors. The Programme is the correct platform to facilitate sector engagements with EU

funders, including with local programmes directed at SMME funding (such as the funds supported by EDSE Programme)

Already, the increased collaboration between local retailers and the cotton value chain has led to a better understanding of the main constraints and opportunities in the domestic value chain, and for the retail sector to identify specific opportunities for additional products. However, to take advantage of some of these international opportunities, will require manufacturers to appreciate and adapt more quickly to changing market trends. This requires access to research and development capabilities that are limited in South Africa, and are driven mainly by European fashion houses and brands.

There are a number of ways in which the EU-South Africa (EU-SA) Partners for Growth Programme could potentially assist in strengthening links between manufactures in South Africa and manufacturing equipment suppliers, as well as brands in Europe. Possible opportunities include:

Facilitate a Sector Finance Forum: While a significant amount of loan support is provided by EU to South African SMMEs, the route to market (through National Treasury and government Departments) is often long and diluted. A sector-focused forum could bring together potential funders to look at proposals to invest in clothing and textile manufacturing capacity in South Africa (including some of the ideas presented in this paper).

Facilitate a Cotton Value Chain Technology Working Group: The purpose would be for EU equipment suppliers and/or industry experts to present new technology, research and products to SA manufacturers and other role-players at an industry level (i.e. the programme would not facilitate business-to-business engagements). Working group sessions could focus on specific themes e.g. fabric and garment printing developments, new dyeing technologies that are environmentally friendly, manufacturing of cotton-based stretch fabrics etc.

Sponsor Sub-Sector Study Tours: There is advantage for the EU to encourage information exchange through study tours to suppliers of equipment, or to engage potential investment partners. The best route for this is through trade fairs, where members of a sub-sector will gain exposure to multiple suppliers and new ideas. Similarly, study tours could be to EU retail brands, to understand their demand-fulfilment practices and position the sector to become a prospective supply hub.

6 Considerations on the Circular Economy for Natural Fibres

Compared to the EU, South Africa is behind the curve on many elements of the recycle, reuse, reduce mantra. For a large part of the population, access to the amenities and information on the circular economy is somewhat distant. Thus, whilst there is a growing consumer awareness in the local market, research by SA Cotton Cluster on customer perceptions on sustainability raised 2 issues (The Moss Group, 2014):

- Consumers with income pressures are influenced by price in their purchasing decisions, and the environmental impact is a secondary consideration.
- Consumers expect brands to be responsible across the board on sustainability best practices, so that the consumer does not have to take the responsibility to check on the brand.

The productive economy in the country, however, is aware and is required to respond to environmental concerns, as part of their triple bottom line reporting. Many brands now require their value chains to look for suppliers that hold the same values on sustainability, and they have started to regularly audit their supply chains for working conditions, reduction of packaging, efficient use of water, and recycling.

With regards to the clothing and textile sector, there is no culture of fabric recycling in the country, and most old clothes end up in landfills. This is for a number of reasons:

- Waste cotton is mostly imported to meet demand where it is an input, for example, in the production of mop yarns, and under-carpet padding.
- Fabrics do not enter the waste cycle with the same magnitude of other recyclables, such as paper, glass, cans and plastic.
- The logistics of collection make for a poor business case. Many discarded clothes find a way into the second-hand clothes market in very poor communities, and do not readily enter a recycling process.
- The different types of fabrics means that it is very difficult to separate these into components for re-use. At best, the waste fabric can be re-purposed, for example, into carpet padding, otherwise it requires a chemical separation to extract cotton from polyester or other fibres.

There are a few exceptions, such as a Cape Town based company that collects production cuttings from clothing factories, and recycles them to create new fabrics (through blending with polyester fibres) (Hertantyo & Shiho Morgan, 2019). There are also very successful local pilot projects for recycling PET bottles into polyester fibres that get knitted to make sportwear. Moreover, many suppliers and manufacturers (driven primarily by consumer and retailer demand) have looked at innovative ways to build sustainable practices into their production operations and value chains:

- Conversion of their cotton supply requirements to meet the Better Cotton Initiative (BCI) standards, which are designed to improve sustainable practices in cotton farming.
- Introduction of natural dyes that are less harmful to the environment, and on-site effluent pre-treatment to reduce contamination of water systems.
- Monitoring of workplace practices to ensure employees are treated and rewarded fairly, and there is no incident of child labour in the value chain.
- Implementing strict guidelines for the care and treatment of animals, particularly relevant to the wool and mohair industries.

These practices help to position products for EU markets, where there is a much higher standard set for compliance to environmentally- friendly practices and trade. However, much more needs to be done to ensure that the South African market does not fall out of step with evolving international requirements. The Programme may be able to assist in exposing South African suppliers to developing technologies and practices in EU countries, particularly in the development of composite fabrics from waste of blended fibres. Similarly, the Programme could commission an environmental and sustainability review of the sector; to describe what will be required to ensure that South African clothing and textiles remain compliant and attractive to EU retail brands.

7 Conclusion

South Africa (with Lesotho) is the world largest producer of Mohair fiber; it also produces high quality wool and has greatly increased its production of cotton over the last five years. Yet despite these apparent advantages and the existence of a mature domestic fashion and retail industry, most of this fibre is exported in bulk and the country then imports most of its fabric and clothing merchandise.

Changes in global trends and regulations have created opportunities for new players in this highly competitive market. Specifically, leading clothing brands are now paying increased attention to fast fashion and quick response times, as well as sustainable and ethical procurement. More recently, the COVID-19 crisis has highlighted the risks of importing from a single country source, and buyers are likely to look to alternative suppliers. South Africa's relatively strong commitment to international labour and production standards, coupled with the recent and sharp depreciation of the rand, places it in a good position to respond to any such swing in demand.

For South African producers to take advantage of new opportunities in both the domestic and international clothing and textile markets, it will need to invest further into the processing of both wool and cotton. This will require additional capital, machinery and technology – and the EU is well-placed to support the South African industry in all of these areas. EU buyers would also likely benefit from the development of an alternative and sustainable supplier of fibre and fabric to its own manufacturing and retail industry.

There are a number of ways in which the current EU-SA Partners for Growth Programme could strengthen linkages between the South African and EU clothing and textile industries, through the design and implementation of a targeted advocacy and information-sharing campaign. The first component of this campaign would revolve around a number of events that serve to bring together local manufacturers with potential partners and markets in the broad 'natural fibres' sector. The focus of these events could include:

- Sector platforms for manufacturers to engage with potential investors, equipment suppliers and buyers in EU markets.
- Information webinars on what EU investors and development funders are looking for, how to access EU venture capital markets, and how to link local products to EU value chains.
- Information sessions with potential EU investors about prospective projects in South Africa's fibre value chains.
- Information sessions for South African suppliers on changes to the regulatory environment, and new trends and technologies, related to the development of sustainable and recyclable fabric in the EU market.

Depending on the success of these initial events, the campaign could then move towards the facilitation of direct business to business engagements, which could possibly be facilitated by other EU Programmes, the EU Chamber or trade missions of member countries. Inward or outward study visits could also be considered.

In order to secure funding for regional spinning capacity, the Programme will also need to engage further with potential institutional investors and development finance institution. This may include

research and/or consultations related to the establishment of a Sector Venture Fund to attract capital into the sector, in partnership with existing government programmes.

Finally, given the substantial support already provided by the South African Government to this sector, the Programme must engage with government programmes (such as the DTIC's Production Incentive Programme) to ensure alignment with local policies, to secure co-funding for investments in the upgrade of manufacturing capacity, and to link into existing export promotion structures. This might include the establishment of a dedicated working group with government (that may ultimately extend to other SADC governments) to deepen cooperation with the EU in this sector.

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