



**TRADE & INDUSTRIAL POLICY STRATEGIES**

**IMPORTS LOCALISATION AND SUPPLY CHAIN  
DISRUPTION STUDY: FIRST QUARTER 2020**

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Trade & Industrial Policy  
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## INTRODUCTION

The COVID-19 pandemic has disrupted global supply chains and trade, causing countries, including South Africa, to return to conversations about increased import localisation as a way to strengthen their industrial base. Such a move requires an understanding of South Africa's industrial capability, along with local and global demand trends that would affect the success of such investments.

This Import Localisation and Supply Chain Disruption study is a quarterly report that seeks to identify goods from the list of imports identified in the [Import Tracker](#) report, whether they have previously been manufactured locally or not, but which South Africa could possibly viably manufacture. Each quarter will focus on five manufactured items from the list of imports in the corresponding quarter's Import Tracker report.

## METHODOLOGY

Rather than create a new data tool, this report will rely on the imports list (by Rand value) provided in the Import Tracker, focusing in particular on manufactured imports. The approach is to use the Top 100 imports by Rand value and is based on: a) it is a more consistent list, compared to the Top 50 imports by quantity which see extensive changes each quarter (in some quarters, a product could be on both lists); and b) the bulk of the value of imports, and therefore localisation potential, largely in the Top 100 list, which often amounts to more than half the value of total imports. In the event that all manufactured imports in the Top 100 list have been analysed, reports will expand beyond the Top 100 list.

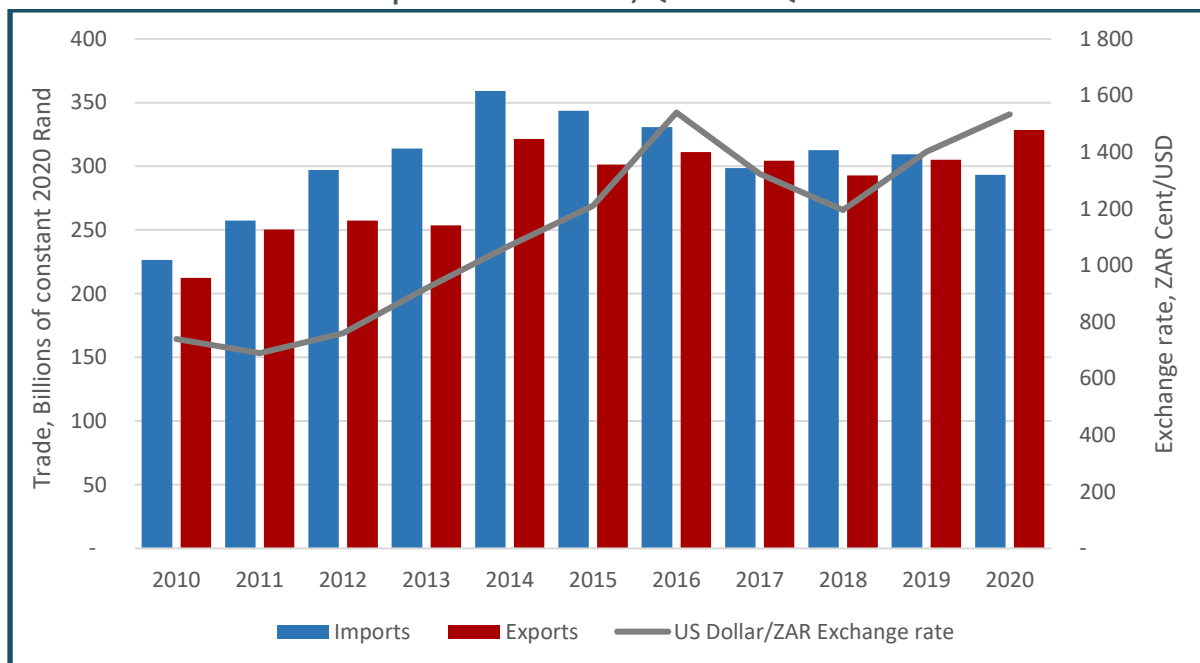
In deciding which imports merit analysis, priority will be given to products that either a) are an input into manufacture of a high-value export product, e.g. automotive components; b) are an input into or a final product for which there is significant demand both locally and regionally; or c) a product for which the import value exceeds R150 million per quarter, which as at the first quarter of 2020 covers more than 230 products at HS8 level. Once the five products have been identified for each quarter, a detailed analysis will be undertaken to understand the extent to which there is local capacity to manufacture that product, as well as the extent of both local and export demand.

The analysis will use a combination of data analysis, desktop research, and, when possible, interviews with companies and industry bodies. The data analysis will use South African Revenue Service (SARS) data as presented on ITC Trade Map. Given that this report relies on the Import Tracker, which in turn relies on SARS data, the report will be released a month after the release of the Import Tracker, with variations when necessary.

## TRADE ANALYSIS

South Africa’s trade balance grew to a surplus of R35 billion in the first quarter of 2020, from a deficit of R4 billion in the previous year. With the exception of the first quarter of 2017, South Africa has had a trade deficit in the first quarter of each year as far back as 2010 (see Graph 1). While imports declined by 5% in the year to the first quarter of 2020, largely influenced by a decline in imports from China due to the COVID-19 lockdown in the country, exports grew by 8%.

**Graph 1: Trade balance, Q1 2010 – Q1 2020**



*Source: Calculated from South African Reserve Bank (SARS) Trade Statistics and South African Reserve Bank (SARB).*

As noted in the Import Tracker, R10.9 billion of the R15.5 billion decline in imports was due to a decline in imports from China due to the COVID-19 lockdown. Imports continued to decline in April and May, and will likely continue to decline as governments deal with the pandemic. Exports, however, have been increasing even with the pandemic, and might continue to rise as trade partners ease their lockdown restrictions.

## PRODUCT ANALYSIS

### **Product 1: Telephones for cellular networks “mobile telephones” or for other wireless networks: designed for use when carried in the hand or on the person**

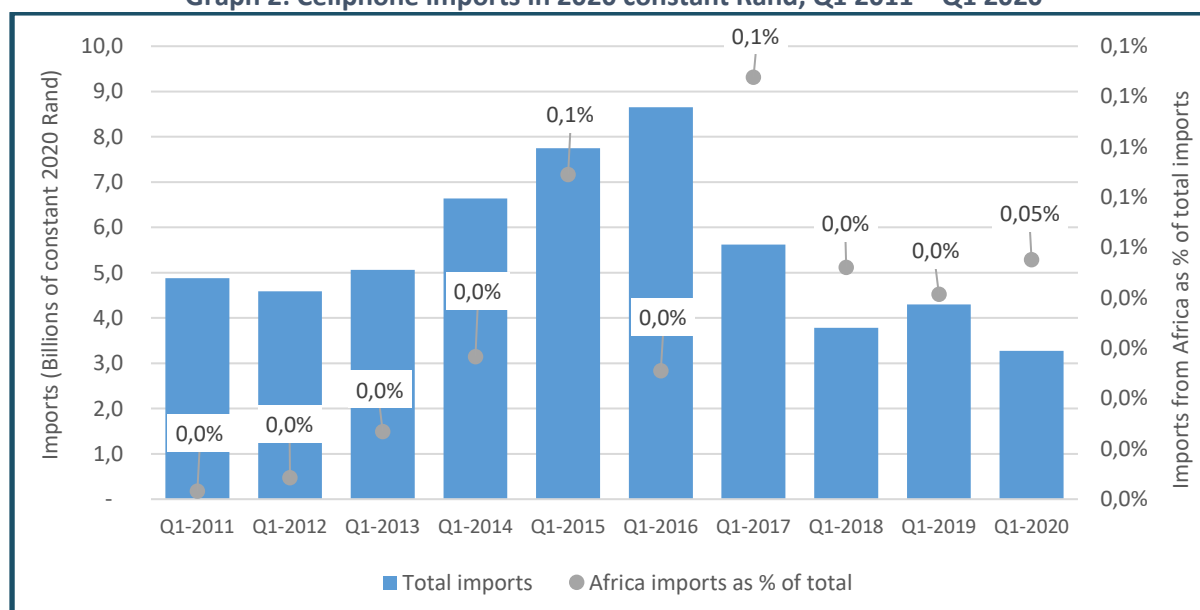
Telephones for cellular networks “mobile telephones” or for other wireless networks designed for use when carried in the hand or on the person (Cellphones, HS 85171210 or SIC code 75213) are a major import commodity coming into South Africa. The product is ranked sixth on the Top 100 imports by Rand value. Table 1 shows the key data for this product, including the Rand value of imports along with the number of units imported.

Table 1: Product key data – Cellphones, Q1 2020

KEY DATA	NOT PREVIOUSLY MADE IN SA	PREVIOUSLY MADE BUT CAN'T COMPETE IN FACE OF LOW COST COMPETITORS	CURRENTLY MADE IN SA AND IMPORTS INCREASING OVER TIME
Rank in Top 100 imports by Rand value			6th
Rand value of imports			R3.26 billion
Rank in Top 50 imports by quantity			N/A
Quantity of imports			4.12 million units
Capital good or consumer good			Consumer good
If intermediate good; what value chain?			N/A
Good for final consumption (yes/no)			Yes
Designation status			Not designated

Graph 2 shows the Rand value of cellphone imports for the period between the first quarter of 2011 and the first quarter of 2020 in constant 2020 Rand. As can be seen on the graph, first quarter imports of cellphones peaked in the first quarter of 2016 when R8.7 billion worth of cellphones were imported. Overall imports in constant Rands have declined over time, beginning at R4.9 billion in 2011, and falling to R3.28 billion in the first quarter of 2020. The bulk of cellphone imports (94%) come from China, with a minor amount (R1.6 million) from some countries within Africa, especially Botswana and Namibia. In quantities, 4.5 million cellphones were imported in the first quarter of 2011 (worth a total of R3.1 billion in constant 2020 Rand), before falling to 4.12 million units by the first quarter of 2020. Over the full year of 2019 a total of 16.5 million units were imported at a value of R16.5 billion.

Graph 2: Cellphone imports in 2020 constant Rand, Q1 2011 – Q1 2020

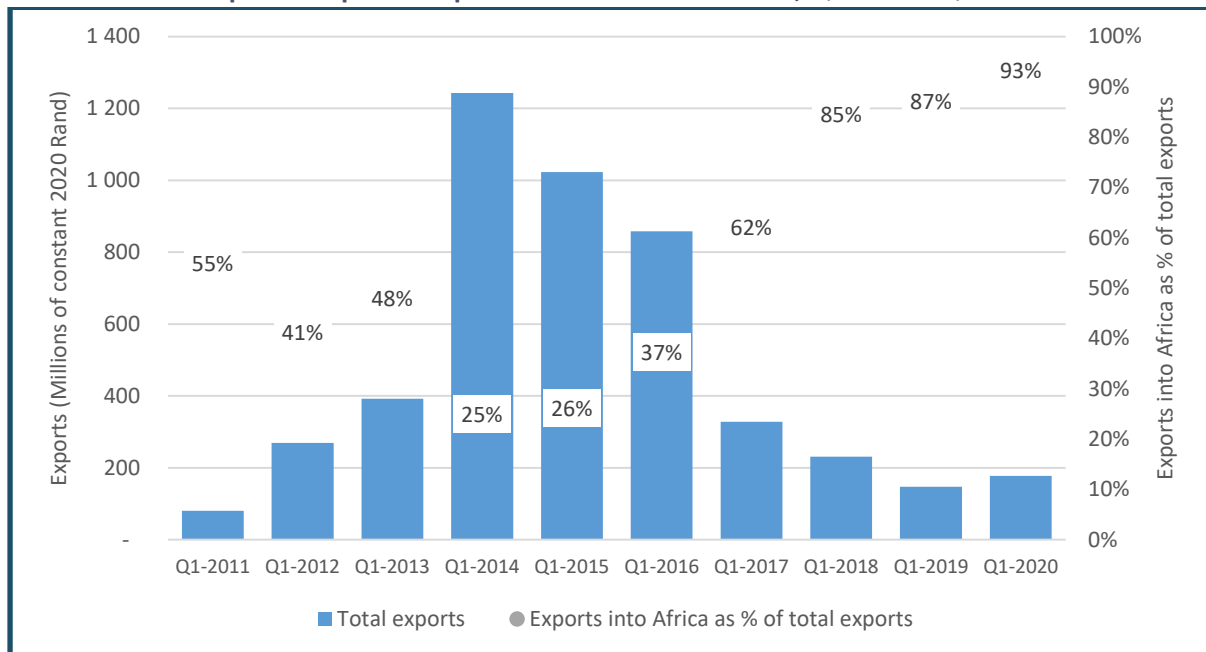


Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

According to Bekker (2019, p1) the local telecommunications sector was worth R187 billion in 2018, employing about 37 000 people across segments such as mobile subscriptions and internet access. Additionally, mobile sales accounted for 53.1% (R99.6 billion) of telecommunications revenue during the same period. Estimates suggest that there are 46.9 million active smartphones in South Africa. It is estimated 25 million devices are sold each year, and the majority of the sales are smartphones (13.5 million) with the balance being basic phones. Further, Bekker (2019, p10) notes that half of the revenue comes from the sale of high-end smartphones (costing R6 000 or more), while low-end smartphones (costing less than R1 500) account for 61% of unit sales and 17% of market revenue.

Graph 3 shows cellphone exports for the period between the first quarter of 2011 and the first quarter of 2020 in constant 2020 Rand. As with imports, exports of cellphones have tended to fluctuate over the years. Exports peaked in the first quarter of 2014, amounting to R1.23 billion, before falling to R178 million by the first quarter of 2020. In quantity, exports grew from 99 496 units in the first quarter of 2011 to 257 477 units in the first quarter of 2020. The bulk of the exports (93% by the first quarter of 2020) went to other African countries, including 124 363 to Namibia and 61 007 to Botswana.

**Graph 3: Cellphone exports in 2020 constant Rand, Q1 2011 – Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

There is some domestic cellphone manufacturing and exports, although exports are largely from products that have been imported. In October 2019, South Africa’s first smartphone manufacturing plant, Mara Phones, was launched in KwaZulu-Natal following a R1.5 billion investment. The plant is expected to produce about 1.2 million smartphones annually (or 29% of the more than four million cellphones imported quarterly), and create about 1 500 jobs (Nkgweng, 2019). Based on the price criteria detailed above, given that the cost of these locally manufactured phones will be between R2 999 and R3 999, this would place them in the middle, thus allowing increased smartphone use among low-income users. Although licensing information about the devices is not readily available, the phones will run on Google’s Android 9 and Go operating systems. Overall, at 84.2%, Android has the highest market share in the mobile operating system industry in South Africa.

This is not the first cellphone manufacturing attempt in South Africa. In 2016, it was reported that Onyx Connect had raised R150 million to begin local manufacturing of smartphones. Progress on this project is not clear. Further, Naidoo (2020) reported that a local computer science graduate launched his own high-end but low-cost smartphone brand (ShumiPhone). About 100 ShumiPhones are manufactured a month, along with computer equipment, at a plant in Durban. Each phone costs about R4 000. The phones run on the company’s Android operating system. At present, the manufacturer employs two people (Ncube, 2020), but is looking to expand production as demand grows.

Mid-level phones accounted for 29% of unit sales and 33% of the value, suggesting there is an opportunity for the brands being manufactured in the country. There is an opportunity for the manufacture of high-end smartphones, but the cost could be a barrier for most consumers, and be a limitation for brand-conscious consumers who prefer specific devices. To serve brand-conscious consumers, local assembly of global brands could present an opportunity to increase local

manufacturing. Given the low volume but high value of branded cellphones, those looking to local manufacturing would have to consider the ability to reach economies of scale in production, and the ability to export globally.

## Product 2: T-shirts, singlets and other vests of cotton, knitted or crocheted

T-shirts, singlets and other vests of cotton, knitted or crocheted (HS 61091000 or SIC code 31300) are ranked 49<sup>th</sup> in the Top 100 list of imports by Rand value. Annually, 66.9 million units of t-shirts were imported in 2019, at a value of R2.2 billion. As can be seen in Table 2, about 13.72 million t-shirts and vests were imported in the first quarter of 2020, at a cost of R558 million.

**Table 2: Product key data – T-shirts, singlets and other vests of cotton, knitted or crocheted, Q1 2020**

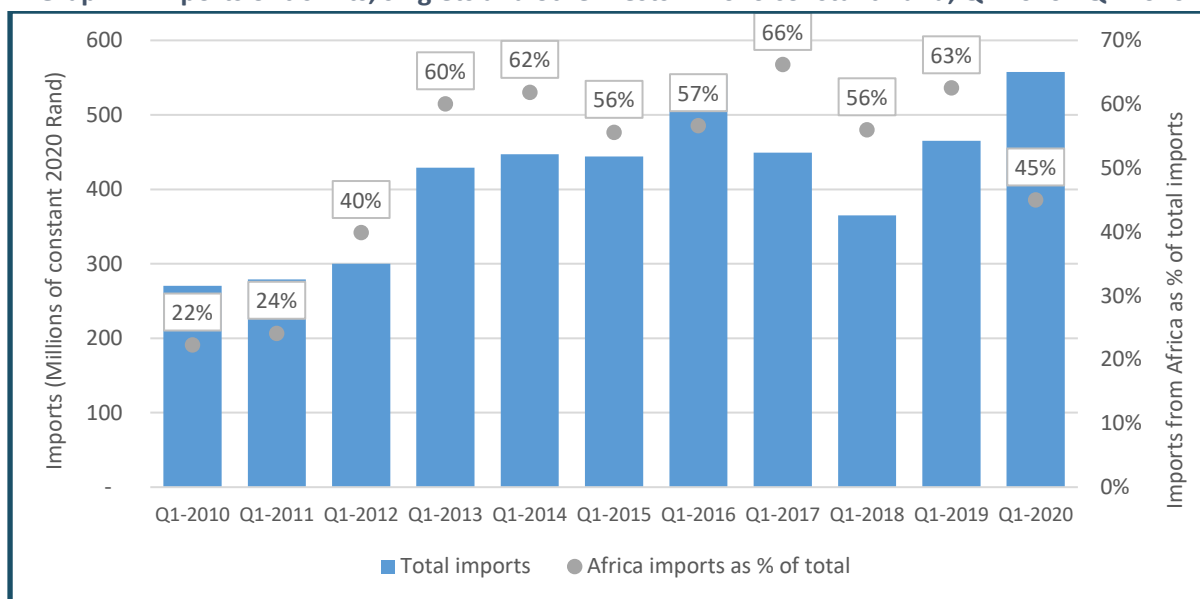
KEY DATA	NOT PREVIOUSLY MADE IN SA	PREVIOUSLY MADE BUT CAN'T COMPETE IN FACE OF LOW COST COMPETITORS	CURRENTLY MADE IN SA AND IMPORTS INCREASING OVER TIME
Rank in Top 100 imports by Rand value			49th
Rand value of imports			R558 million
Rank in Top 50 imports by quantity			N/A
Quantity of imports			13.72 million units
Capital good or consumer good			Consumer good
If intermediate good; what value chain?			N/A
Good for final consumption (yes/no)			Yes
Designation status			100% designated

The entry of South Africa into the World Trade Organization (WTO) in 1995 saw increased competition for local manufacturers which had to contend with cheap imports from Asia, especially China. Veitch (2019, p15) notes that the clothing and textile value chain has not only been impacted by cheap imports, but also by technological advances that have resulted in the large-scale automation of production, and in turn reduced employment. In 2018, 85 000 people were employed in the clothing, textiles, footwear and leather (CTFL) sector across roughly 800 manufacturing businesses.

Graph 4 shows imports, in constant 2020 Rand, of this clothing product for the period between the first quarter of 2010 and the first quarter of 2020. Total imports have more than doubled over this period, from R271 million to R558 million quarterly. Additionally, imports from other African countries have also increased, growing by more than 300% to R251 million from R60 million. China accounts for 28.5% of the value of imports, followed by Mauritius and Madagascar at 13.6% and 10.2% respectively. However, for imported quantities, China accounts for 21% of imports, followed by India (17.8%), Lesotho (15.6%) and eSwatini (11.1%). The clothing industry is reported to represent a significant area of employment in Lesotho and eSwatini.

Although the bulk of imports come from China, there was a 61% decline in volumes of Chinese imports between the first quarter of 2010 and the first quarter of 2020. During this period, South Africa began importing t-shirts and other such garments from Lesotho and eSwatini, which now supply a combined 3.7 million units of this product per quarter. The cause of the decline in imports from China is not clear, but Veitch (2019, p2) notes that with the introduction of the African Growth and Opportunity Act (AGOA) of 2000, some countries in Sub-Saharan Africa have been taking advantage of this and exporting CTFL products to the United State of America (US) duty free. Although there are no local content requirements in the other countries, South African CTFL products are expected to contain local content.

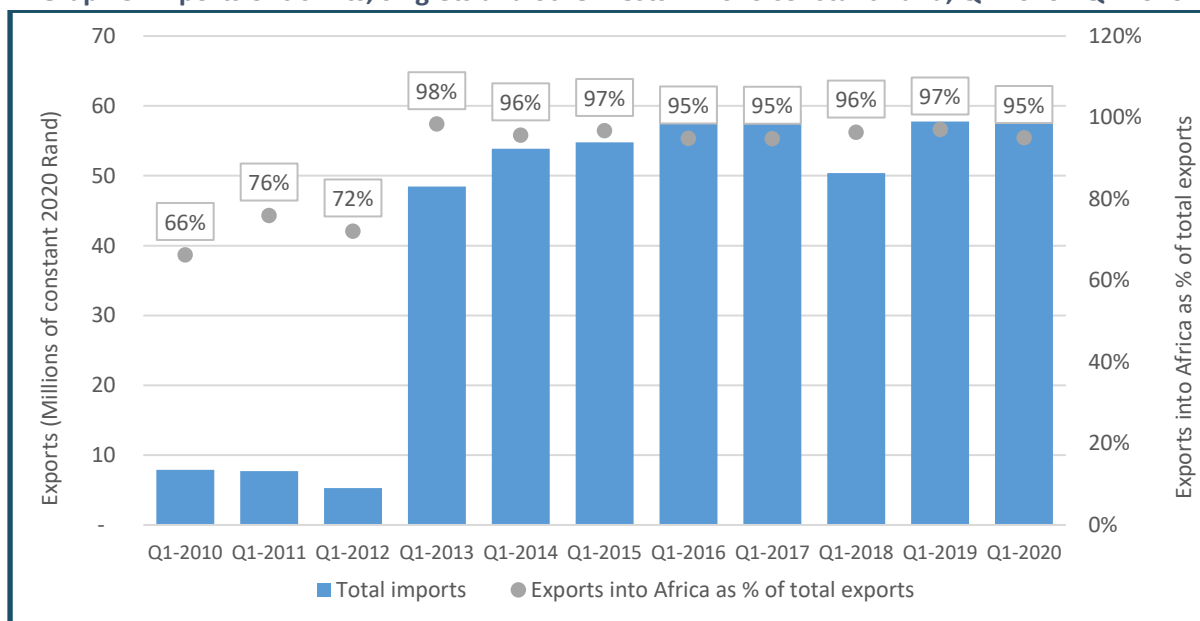
**Graph 4: Imports of t-shirts, singlets and other vests in 2020 constant Rand, Q1 2010 - Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

During the early years of AGOA implementation, South African exports of t-shirts and vests ranged between 1.2 million and 5.9 million items per quarter, with the bulk of the exports going to the US. These exports declined to their lowest between 2008 and 2012, but began to recover by the first quarter of 2013. Nevertheless, the recovery has not returned to pre-2008 levels, and t-shirt and vest exports to the US barely reach 3 000 units a quarter. Graph 5 shows exports of t-shirts, vests and singlets (in constant 2020 Rand) for the period between the first quarter of 2010 and the first quarter of 2020.

**Graph 5: Exports of t-shirts, singlets and other vests in 2020 constant Rand, Q1 2010 - Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

In the R-CTFL [Retail-CTFL] Value Chain Masterplan to 2035, Barnes and Higginson (2019) note some of the strengths and weaknesses of the local R-CTFL value chain, which include outdated production processes along with weaknesses in human capital and skills. The Masterplan also outlines some recommendations for the value chain, and any work to revitalise the value chain should thus be aligned with the Masterplan.



**Product 3: Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather (excluding covering the ankle, incorporating a protective metal toecap, sports footwear, orthopaedic footwear and toy footwear): other**

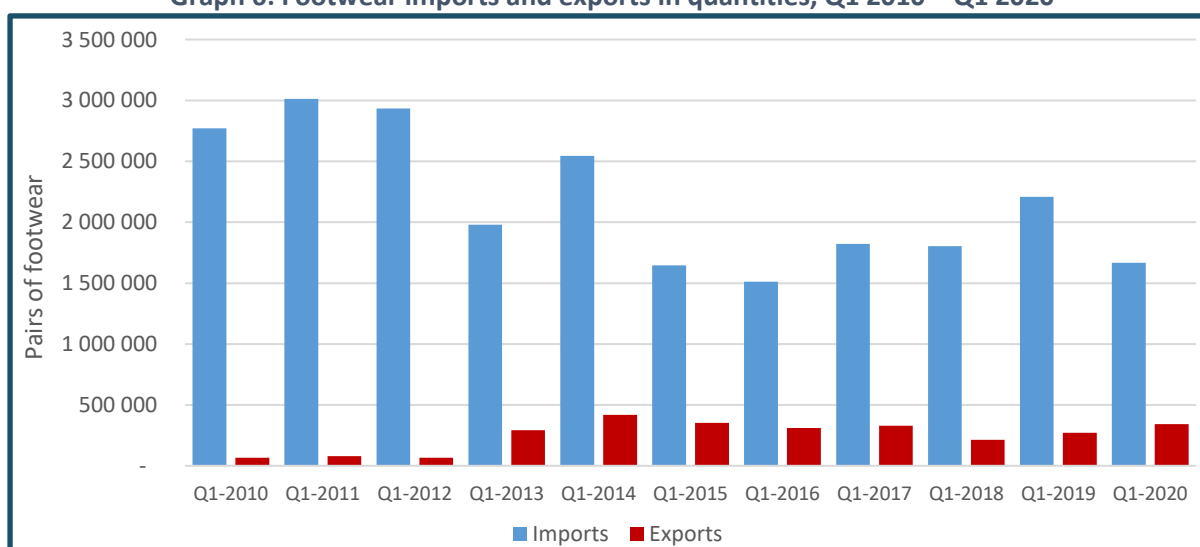
Footwear with outer soles of rubber, plastics or composition leather (HS 64039990 or SIC code 31700) is ranked 68th on the Top 100 list of imports by value. Footwear is part of the CTFL sector, and is 100% designated for local content and production. Footwear covers a range of products such as formal and informal shoes, protective footwear, sandals and slippers. Overall, footwear can be grouped into types based on the material used to manufacture them, or how they are manufactured. For instance, Shand (2019, p2) notes that types of footwear include slippers and wholly moulded footwear; fabric uppers and running shoes; shoes of leather uppers; and shoes of synthetic uppers. About 10.4 million pairs of shoes were imported in 2019 at a cost of R1.9 billion. Table 3 shows key data for the first quarter of 2020.

**Table 3: Product key data – Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, Q1 2020**

KEY DATA	NOT PREVIOUSLY MADE IN SA	PREVIOUSLY MADE BUT CANNOT COMPETE IN FACE OF LOW-COST COMPETITORS	CURRENTLY MADE IN SA AND IMPORTS INCREASING OVER TIME
Rank in Top 100 imports by Rand value			68th
Rand value of imports			R410 million
Rank in Top 50 imports by quantity			N/A
Quantity of imports			1.67 million pairs
Capital good or consumer good			Consumer good
If intermediate good; what value chain?			N/A
Good for final consumption (yes/no)			Yes
Designation status			100% designated

Graph 6 shows the quantity of footwear imports and exports for the period between the first quarter of 2010 and the first quarter of 2020. Over this period, South African exports of footwear grew from about 2.4% of the size of imports to about 20.5% the size of imports. This is the result of both a decline in quantities imported and a growth in exports. Between the first quarter of 2010 and the first quarter of 2020 imports declined by 40%, while exports grew by 408%. The decline in imports is the result of a decline in imports from China, while regionally, Lesotho has driven the increase in demand for South African footwear exports.

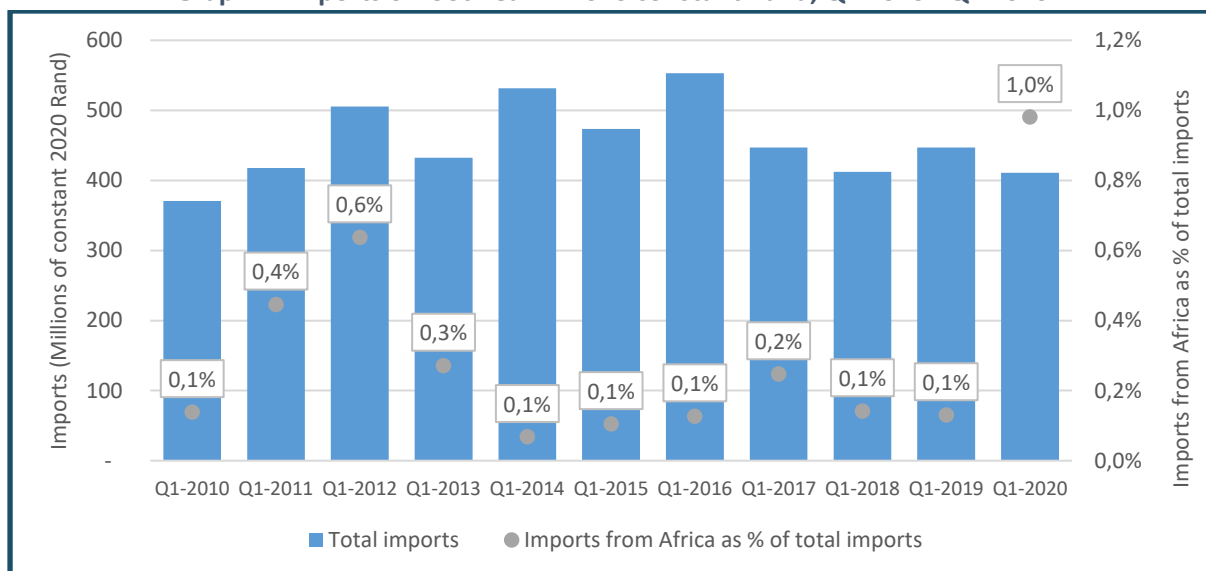
**Graph 6: Footwear imports and exports in quantities, Q1 2010 – Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

In Rand terms, total imports grew by 10.8% between the first quarter of 2010 and the first quarter of 2020, from R370.9 million to R410.9 million (see Graph 7). The proportion of the value of imports coming from the continent barely moved over the same period, only reaching 1% in the first quarter of 2020. The composition of imports by country has changed over time. In the first quarter of 2010, Chinese imports accounted for 73.3% of the quantity and 51.1% of the value; by the first quarter of 2020, imports from China accounted for 44.5% of the quantity and 35.4% of the value. With imports from China declining, Vietnam has grown its footwear exports to South Africa, from 210 912 pairs in the first quarter of 2010 to 354 991 pairs (or R41.9 million) in the first quarter of 2020 (or R97.4 million).

**Graph 7: Imports of footwear in 2020 constant Rand, Q1 2010 - Q1 2020**



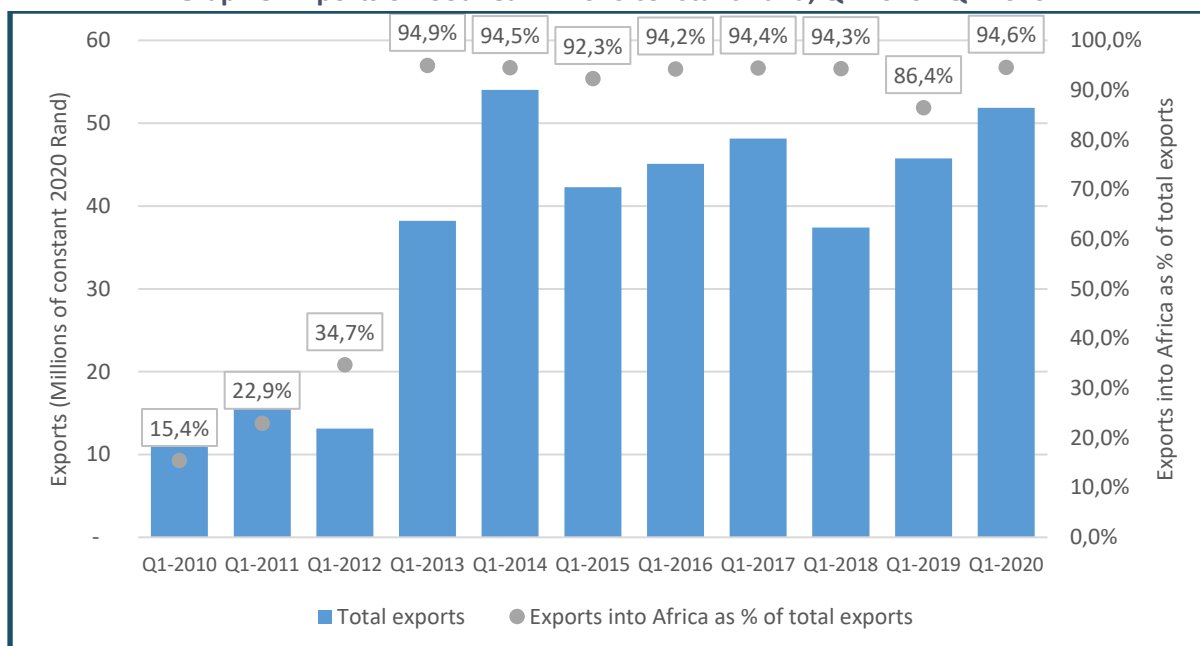
Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

According to Shand (2019, p1), in 2018 the local footwear industry was valued at an estimated R63.3 billion in retail sales, and R5.7 billion in sales at manufacturing levels. Over the same period, 10 924 people were employed in the footwear industry, down from 11 387 in 2017. An estimated 76.8% of manufacturing happens in KwaZulu-Natal, followed by Gauteng and Western Cape at 12.9% and 6.5% respectively. Actual footwear manufacturing has been fluctuating over the years, peaking at 67 million pairs in 2016, before falling to 56.9 million pairs in 2018. Local manufacturing accounts for 0.3% of global production.

Shand (2019, p4) writes that local demand amounted to 263.8 million pairs of shoes in 2018. However, while local demand for footwear has been increasing over the years, the growth in imports has made it harder for local manufacturers to compete both locally and globally. As such, the number of manufacturers producing more than one million shoes declined to 70 in 2018 from 92 in the previous year. About three manufacturing plants closed down over that period.

South African exports of the footwear product under review increased over the years, from 67 345 pairs in the first quarter of 2010 to 341 848 pairs in the first quarter of 2020. The growth in exports is driven by growth in regional demand, which grew from 293 pairs in the first quarter of 2010 to 312 303 pairs in the first quarter of 2020. Regional demand is driven by Zambian imports, which account for 18.9% of South African exports, along with Namibia (17.1%), Botswana (15.3%) and Lesotho (14.8%). In value, regional exports grew from 15.4% of total exports in 2010 to 94.6% by the first quarter of 2020 (see Graph 8). Given that local manufacturing of footwear amounts to about 50 million or more pairs of shoes, the bulk of regional demand is met through re-exports of imported products.

**Graph 8: Exports of footwear in 2020 constant Rand, Q1 2010 - Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

In the R-CTFL value chain Masterplan to 2035, Barnes and Higginson (2019) note some of the strengths and weaknesses of the local R-CTFL value chain, which include outdated production processes along with weaknesses in human capital and skills. The Masterplan also outlines some recommendations for the value chain, and any work to revitalise the value chain should thus be aligned with the Masterplan. Nevertheless, a way forward for the R-CTFL, and the footwear industry in particular, will require some out-of-the-box thinking to increase local production without relying on tariffs, which are higher than those of some of the largest manufacturing countries.

#### Product 4: Dumpers for off-highway use: other

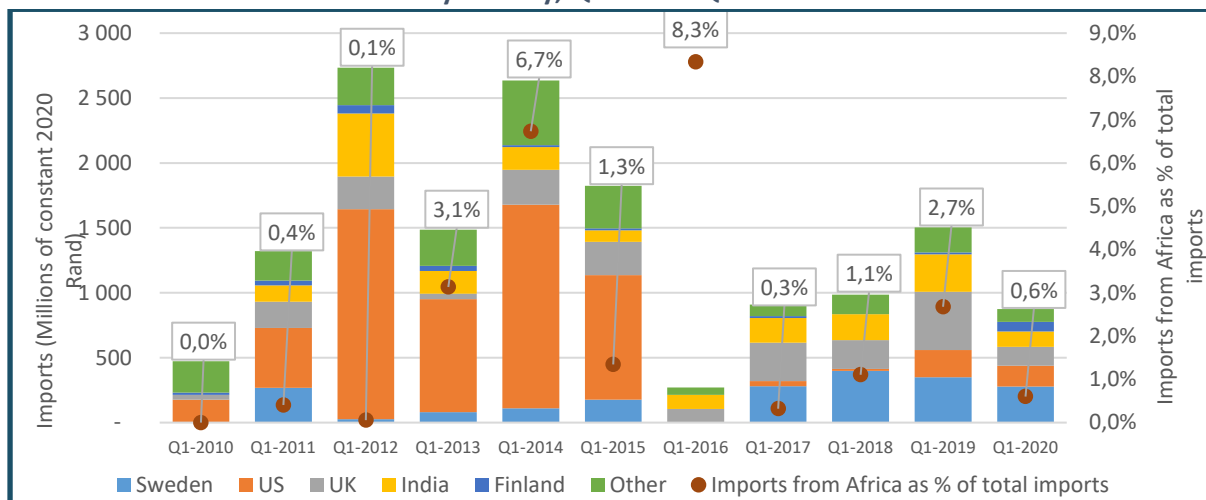
In the first quarter of 2020, dumpers for off-highway use (HS 87041090 or SIC code 38000) were ranked 36th in the Top 100 list of imports by value. According to Ardent Hire Solutions (2019), dumpers within construction are used to transport materials cleared from a site at the beginning stages of a project. However, dumpers are used in various industries including mining and quarrying, along with construction Table 4 shows the product key data for dumpers, including its rank on the Top 100 list, designation status, and value of imports.

**Table 4: Key data – Dumpers for off-highway use, Q1 2020**

KEY DATA	NOT PREVIOUSLY MADE IN SA	PREVIOUSLY MADE BUT CANNOT COMPETE IN FACE OF LOW COST COMPETITORS	CURRENTLY MADE IN SA AND IMPORTS INCREASING OVER TIME
Rank in Top 100 imports by Rand value			36th
Rand value of imports			R873.4 million
Rank in Top 50 imports by quantity			N/A
Quantity of imports			148 units
Capital good or consumer good			Capital good
If intermediate good; what value chain?			N/A
Good for final consumption (yes/no)			Yes
Designation status			Not designated

Dumpers are a capital good with low production volumes but with high value. A total of 757 units were imported in 2019 for about R4.2 billion. Quarterly, there has been a 410% growth in imports, from 29 units in the first quarter of 2010 to 148 units in the first quarter of 2020. In Rand terms, imports grew from R473 million to R873 million in constant 2020 terms. Between the first quarter of 2010 and the first quarter of 2015, the US accounted for the majority of imports, ranging from 37.4% in 2010 to 52.5% by 2015. Imports from the US have since fallen to 18.5%, while imports from Sweden and the UK have risen (see Graph 9). In contrast, African countries have been providing a declining share of dumpers imported by South Africa. Lastly, there are some reimports<sup>1</sup> of this product, although they tend to fluctuate anywhere between R150 000 and almost R30 million a quarter.

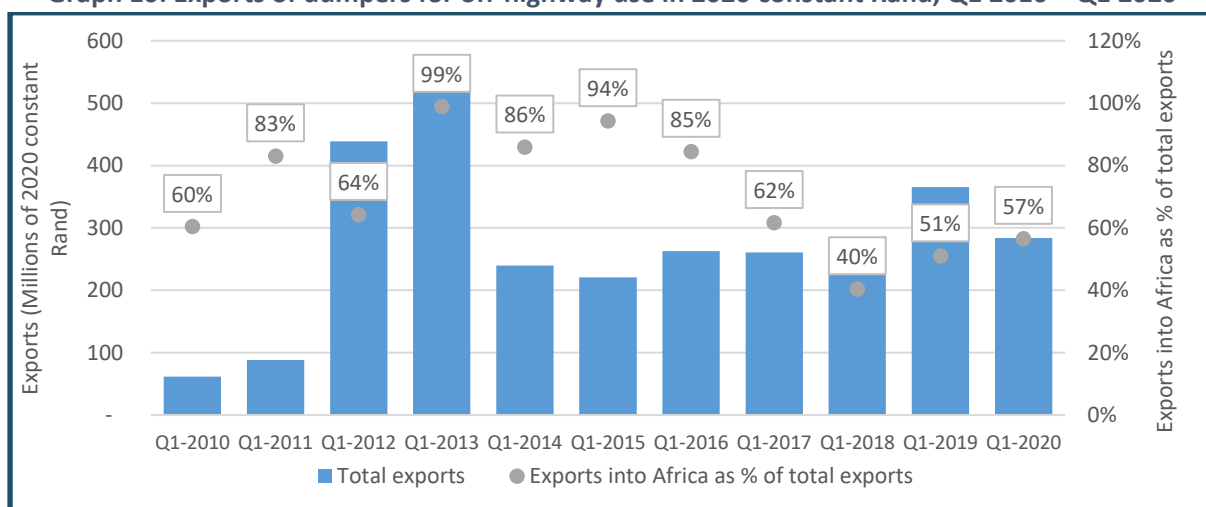
**Graph 9: Imports of dumpers for off-highway use in 2020 constant Rand, by country, Q1 2010 – Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

Disaggregated information relating to local production of dumpers is not readily available. However, Conradie (2019, p1) notes that 5 614 units of mining and construction equipment (special purpose machinery) were sold in 2017, with seasonally adjusted sales at R4.6 billion (current) in December 2017. Although there is local production of special purpose machinery, including dumpers, some of the local manufacturers also act as importers and sellers of products from global producers. It is not clear how many people are employed in the production of dumpers, but an estimated 34 000 were employed in special purpose machinery manufacturing.

**Graph 10: Exports of dumpers for off-highway use in 2020 constant Rand, Q1 2010 – Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

<sup>1</sup> According to Trade Map, reimports refer to imports of goods in the same state as previously exported.

South Africa has some of the best manufacturers of special purpose equipment, including dumpers. The extent of local production of dumpers is not readily available. However, exports of the product have been growing over the years, from 43 units in the first quarter of 2010 to 129 units in the first quarter of 2020. In value, total exports grew by 362% in the 11-year period to the first quarter of 2020, while regional exports grew by 333%, with a peak in the first quarter of 2013 at R569 million in export value (see Graph 10). Regional exports account for the highest share of total exports, though there has been a decline since 2016.

Generally, because dumpers are capital equipment for other industries, demand for this product depends on the economic well-being of those industries, both locally and globally. Conradie (2019, p2) notes that the mining industry accounts for the bulk of capital equipment demand, at about 80%, while in developed countries the construction sector drives demand. This is to say, any downturn in these industries, such as that resulting from the COVID-19 lockdowns, will impact demand and export earnings. Uncertainties such as these, along with rising input costs – in particular basic iron and steel, water and electricity – are raising challenges for local manufacturers and impacts on their global competitiveness.

The World Intellectual Property Organisation Intellectual Property Portal (WIPO IP Portal) lists more than 740 patents relating to dumpers and dumper components. The patents include a design method for comfortable off-highway dumpers, fourwheel dump trucks, and payload monitors. However, it is not clear when these patents will expire. Locally, with National Treasury having earmarked funds for research and development (R&D), manufacturers, the state and consumers (i.e. mining companies) are working on R&D focusing on next generation mining systems to improve efficiency and extend the lifespan of local mines (Conradie, 2019, p17).

#### **Product 5: Wire of refined copper with a maximum cross-sectional dimension of >6 mm**

Wire of refined copper, with a maximum cross-sectional dimension of > 6 mm (HS 74081100 or SIC code 35592) is ranked 27th in the Top 100 list of imports by value. Annual imports of wire of refined copper grew from R2.7 billion in 2010 to R5 billion in 2019, in constant 2020 Rand. Quarterly imports of the product amount to R1.02 billion in the first quarter of 2020.

Table 5 shows the product data for this product, including the quantity of imports and designation status.

**Table 5: Key data – Wire of refined copper with a maximum cross-sectional dimension of >6 mm, Q1 2020**

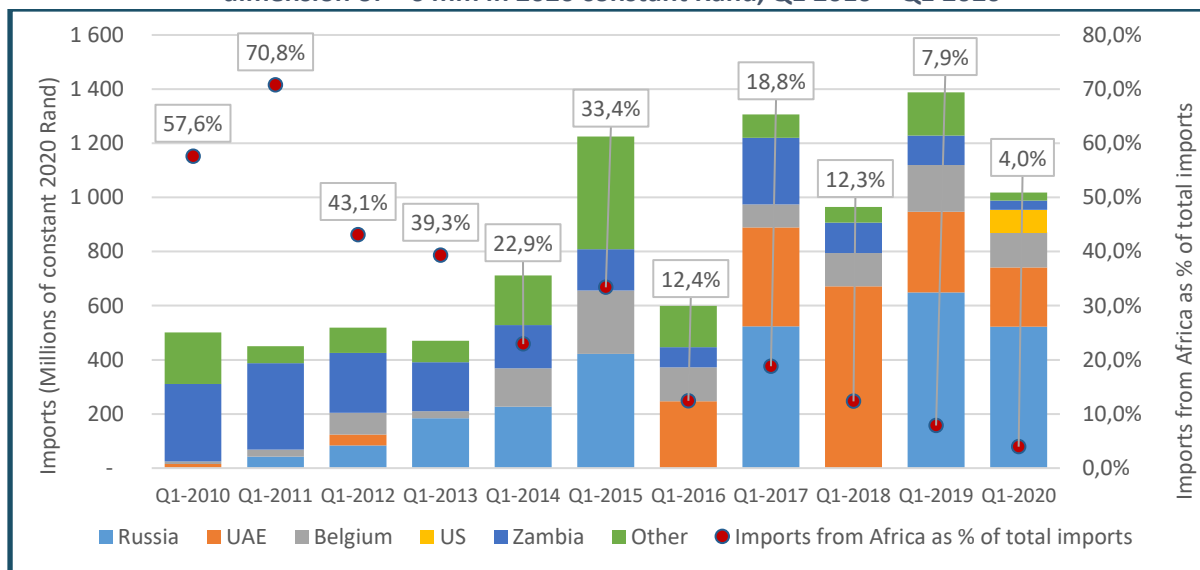
KEY DATA	NOT PREVIOUSLY MADE IN SA	PREVIOUSLY MADE BUT CAN'T COMPETE IN FACE OF LOW COST COMPETITORS	CURRENTLY MADE IN SA AND IMPORTS INCREASING OVER TIME
Rank in Top 100 imports by Rand value			27th
Rand value of imports			R1.02 billion
Rank in Top 50 imports by quantity			N/A
Quantity of imports			11.3 million kilograms
Capital good or consumer good			Capital good
If intermediate good; what value chain?			Various (telecommunications, energy etc.)
Good for final consumption (yes/no)			No
Designation status			Not designated

Refined copper wire is a semi-manufactured product that is an input used in the production of cables, which in turn are used in different value chains, including automotives, mining, communications and construction. On its own, this product is not designated. However, it is an input for cables, which in

turn are 90% designated as per Department of Trade, Industry and Competition (DTIC) guidelines. According to Mahomed (2019, p9), copper accounts for about 40% of the cost of cable production, and the price of copper is in turn determined by the spot price as per the London Metal Exchange.

Quarterly imports of refined copper wire grew by 102.8% in the 11-year period to the first quarter of 2020. The growth in imports has been driven by the entry of Russia into the South African market in 2011. Imports from Russia grew from R43 million in 2011 to R523 million in the first quarter of 2020. Russia’s entry into the local market displaced imports from Zambia, which in 2010 accounted for 57% of total imports, declining to 3.4% as at the first quarter of 2020 (see Graph 11). Imports from Zambia account for almost all imports from the region.

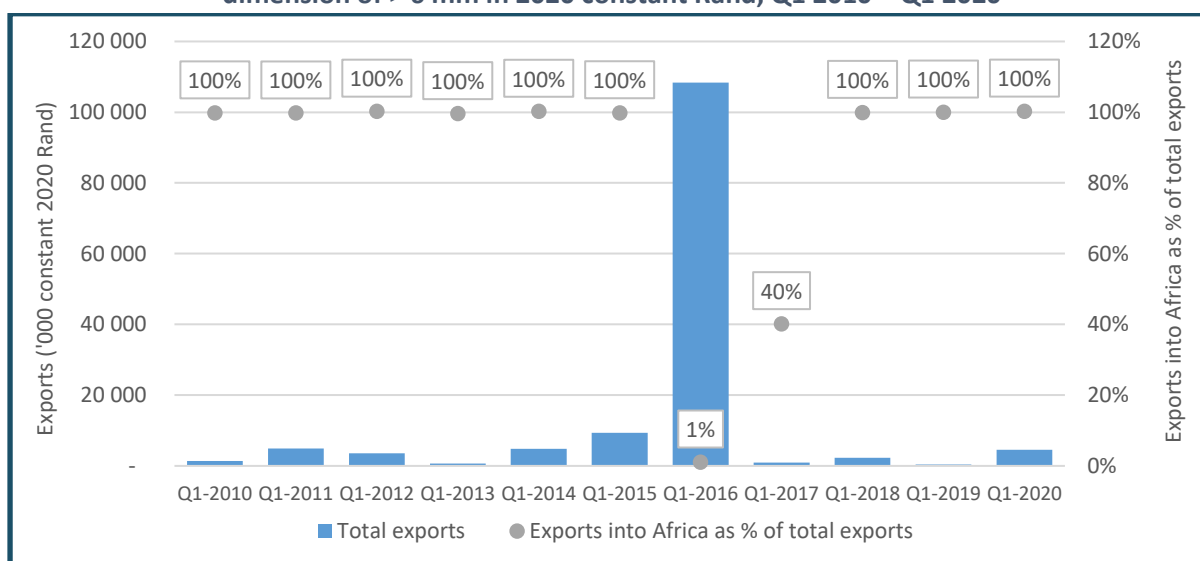
**Graph 11: Imports of wire of refined copper, with a maximum cross-sectional dimension of > 6 mm in 2020 constant Rand, Q1 2010 – Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

The size of local production capacity is not clear, but given the small amount of exports, production is likely low. Exports, which fluctuate, peaked at R108.4 million in the first quarter of 2016 as a result of demand from the Republic of Korea, Hong Kong, India and Singapore. Graph 12 shows exports of refined copper wire for the period between the first quarter of 2010 and the first quarter of 2020.

**Graph 12: Exports of wire of refined copper, with a maximum cross-sectional dimension of > 6 mm in 2020 constant Rand, Q1 2010 – Q1 2020**



Source: Author. Calculated from ITC Trade Map. Downloaded from <https://www.trademap.org> in July 2020.

At current export levels and, by proxy, production, South Africa is not competitive in refined copper wire production. However, given its use in several value chains and access to copper both locally and regionally, there is room for South Africa to grow refined copper wire production. Mahomedy (2019, p3) notes that the local cable market is estimated at R8 billion per annum. According to Mackay (2019), local copper production stands at 40 000 tonnes per year, and recycled copper is estimated at around 160 000 tonnes per year, while annual demand stands at 400 000 tonnes. Zambia and the Democratic Republic of Congo are potential sources for copper, it should be noted that Zambia is looking to incentivise manufacturers to produce in the country using the raw material which is mined there.

## BIBLIOGRAPHY

Ardent Hire Solutions. 2019. *Ardent Hire Solutions*. [Online] Available at: <https://www.ardenthire.com/blog/how-to-use-a-dumper-truck-in-construction-projects/> [Accessed 28 July 2020].

Barnes, J. and Higginson, L. 2019. *South African R-CTFL value chain Masterplan to 2035: Report 4 of 4*. Durban: B&M Analysts.

Bekker, D. 2019. *The telecommunications industry and retail of devices*. Johannesburg: Who Owns Whom.

Conradie, A. 2019. *Manufacture and wholesale of machinery for mining, quarrying and construction*, Johannesburg: Who Owns Whom.

Mackay, C. 2019. *Mining weekly*. [Online] Available at: [https://m.miningweekly.com/article/s-africa-could-face-copper-shortage-in-next-five-years-2019-04-02/rep\\_id:3861](https://m.miningweekly.com/article/s-africa-could-face-copper-shortage-in-next-five-years-2019-04-02/rep_id:3861) [Accessed 28 July 2020].

Mahomedy, Y. 2019. *Manufacture of unsulated wire and cable*, Johannesburg: Who Owns Whom.

Naidoo, A., 2020. *The South African*. [Online] Available at: <https://www.thesouthafrican.com/technology/mobile/student-launches-smartphone-lesley-ncube-thatha/> [Accessed 24 July 2020].

Ncube, L. 2020. Interview with Lesley Ncube about the ShumiPhone [Interview] (24 July 2020).

Nkgweng, T., 2019. *Ramaphosa launches SA's first cell phone manufacturing plant*. SABC News. [Online] Available at: <https://www.sabcnews.com/sabcnews/ramaphosa-launches-sas-first-cell-phone-manufacturing-plant/> [Accessed 23 July 2020].

Shand, N. 2019. *The footwear industry*, Johannesburg: Who Owns whom.

Veitch, C. 2019. *The clothing industry*, Johannesburg: Who Owns Whom.



## ANNEXURE 1: TOP IMPORT PRODUCTS BY RAND VALUE, Q1 2020

RANK	HS CODE	PRODUCT DESCRIPTION	IMPORT VALUE, RAND BILLION	CHANGE IN RANK Q1 2019 – Q1 2020	DESIGNATION STATUS
1	27090000	Crude oil	29.96	No change	Not designated
2	98010030	Automotive components: For motor cars	15.87	No change	Not designated
3	27101230	Diesel	12.94	No change	Not designated
4	98010040	Original equipment components: For goods vehicles	7.37	No change	Not designated
5	49070010	Postage stamps, revenue stamps and banknotes	4.35	6	Not designated
6	85171210	Cellphones	3.26	No change	Not designated
7	87032290	Cars and related vehicles: cylinder capacity 1 000 cm <sup>3</sup> to 1 500 cm <sup>3</sup>	2.87	2	Not designated
8	87032390	Cars and related vehicles: cylinder capacity 1 500 cm <sup>3</sup> to 3 000 cm <sup>3</sup>	2.80	-3	Not designated
9	98010045	Original equipment components: For goods vehicles	2.66	-2	Not designated
10	85176290	Routers and set-top boxes: Other	2.28	-2	Not designated
11	27101202	Light oils and preparations: Petrol	2.06	-1	Not designated
12	87032190	Cars and related vehicles: Cylinder capacity not exceeding 1 000 cm <sup>3</sup>	2.03	24	Not designated
13	33021000	Alcoholic and other solutions used in the food and drink industries	1.56	2	Not designated
14	28182000	Aluminium oxide	1.55	-2	Not designated
15	71023100	Non-industrial diamonds unworked or simply sawn, cleaved or bruted	1.39	1	Not designated
16	90189000	Medical instruments and appliances, n.e.s	1.38	4	Not designated
17	71081300	Gold, in semi-manufactured forms, for non-monetary purposes	1.27	16	Not designated
18	84715000	Processing units for automatic data-processing machines	1.22	5	Not designated
19	87082900	Parts and accessories of bodies for tractors and buses	1.22	10	Not designated
20	87033290	Cars and related vehicles: cylinder capacity 1 000 cm <sup>3</sup> to 2 500 cm <sup>3</sup>	1.22	-7	Not designated
21	10063000	Semi-milled or wholly milled rice, whether or not polished or glazed	1.21	1	Not designated
22	84314990	Parts of machinery of heading 8426, 8429 and 8430, not elsewhere specified (n.e.s): Other	1.19	-4	Not designated



RANK	HS CODE	PRODUCT DESCRIPTION	IMPORT VALUE, RAND BILLION	CHANGE IN RANK Q1 2019 – Q1 2020	DESIGNATION STATUS
23	22030090	Beer made from malt: Other	1.19	30	Not designated
24	27160000	Electrical energy	1.16	11	Not designated
25	98010015	Automotive components: For tractors and buses	1.12	15	Not designated
26	27111100	Natural gas, liquefied	1.11	No change	Not designated
27	74081100	Wire of refined copper, with a maximum cross-sectional dimension of > 6 mm	1.02	-8	Not designated
28	84439900	Parts and accessories of printers, copying machines and facsimile machines, n.e.s.	1.02	-1	Not designated
29	87089990	Parts and accessories for tractors and buses	0.95	5	Not designated
30	28439000	Inorganic or organic compounds of precious metals	0.94	139	Not designated
31	85044000	Static converters	0.94	-7	Not designated
32	38220000	Diagnostic or laboratory reagents (pharmaceutical chemicals)	0.92	6	Not designated
33	87032490	Cars and related vehicles: Cylinder capacity exceeding 3 000 cm3	0.91	-5	Not designated
34	98010025	Original equipment components: For buses and taxis	0.86	11	Not designated
35	88033000	Parts of aeroplanes or helicopters, n.e.s. (excluding those for gliders)	0.85	7	Not designated
36	87041090	Dumpers for off-highway use: Other	0.85	-19	Not designated
37	30022000	Vaccines for human medicine	0.83	4	Not designated
38	85177090	Parts for telephones, routers and other telecoms devices	0.80	-17	Not designated
39	85023100	Generating sets, wind-powered	0.78	4402	Not designated
40	87033390	Cars and related vehicles: cylinder capacity exceeding 2 500 cm3	0.75	-15	Not designated
41	84291100	Self-propelled bulldozers and angle dozers	0.65	138	Not designated
42	74031100	Refined copper	0.65	174	Not designated
43	71129990	Waste and scrap of silver, including metal clad with silver	0.65	5242	Not designated
44	38112100	Additives for oil lubricants containing petroleum oil or bituminous mineral oil	0.64	23	Not designated
45	27011900	Coal (excl. anthracite and bituminous coal)	0.61	-14	Not designated
46	69091900	Ceramic wares for chemical or other technical uses	0.60	-7	Not designated

RANK	HS CODE	PRODUCT DESCRIPTION	IMPORT VALUE, RAND BILLION	CHANGE IN RANK Q1 2019 – Q1 2020	DESIGNATION STATUS
47	39269090	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s.: Other	0.59	2	Not designated
48	94019090	Parts of seats, n.e.s.: Other	0.56	-1	85% - 100% designated
49	61091000	T-shirts, singlets and other vests of cotton, knitted or crocheted	0.55	12	100% Designated
50	84717000	Storage units for automatic data-processing machines	0.55	-7	Not designated
51	85443000	Ignition wiring sets and other wiring sets for vehicles, aircraft or ships	0.55	-1	90% designated
52	85414090	Photosensitive semiconductor devices, including photovoltaic cells	0.54	625	15% designated
53	84433100	Printers and fax machines	0.53	5	Not designated
54	84733000	Parts and accessories of automatic data-processing machines	0.52	-8	Not designated
55	33049990	Beauty or make-up preparations and preparations for the care of the skin: Other	0.51	No change	Not designated
56	87085085	Drive-axles	0.50	-2	Not designated
57	61103000	Jerseys, pullovers, cardigans, waistcoats and similar articles	0.47	No change	100% Designated
58	21069090	Food preparations, n.e.s.: Other	0.46	1	Not designated
59	99000000	Commodities not elsewhere specified	0,46	122	Unclear
60	84295200	Self-propelled bulldozers, etc.: With 360 degree revolving superstructure	0.44	-28	Not designated
61	87083090	Brakes and servo-brakes and their parts: Other	0.44	16	Not designated
62	84798990	Machines and mechanical appliances, n.e.s.: Other	0.44	-11	Not designated
63	73269090	Articles of iron or steel, n.e.s.: Other	0.43	7	100% Designated
64	88021100	Helicopters of an unladen weight <= 2.000 kg	0.42	655	Not designated
65	23040000	Oilcake and other solid residues from the extraction of soya-bean oil	0.42	142	Not designated
66	29173600	Terephthalic acid and its salts	0.42	-10	Not designated
67	88021200	Helicopters of an unladen weight > 2.000 kg	0.41	131	Not designated
68	64039990	Footwear with outer soles: Other	0.41	-3	100% Designated

RANK	HS CODE	PRODUCT DESCRIPTION	IMPORT VALUE, RAND BILLION	CHANGE IN RANK Q1 2019 – Q1 2020	DESIGNATION STATUS
69	85437000	Electrical machines and apparatus, having individual functions, n.e.s. in chapter 85	0.40	-7	Not designated
70	88023000	Aeroplanes and other powered aircraft	0.39	59	Not designated
71	64029100	Footwear covering the ankle, with outer soles and uppers of rubber or plastics	0.38	23	100% Designated
72	84834000	Gears and gearing for machinery	0.38	9	Not designated
73	27011200	Bituminous coal, whether or not pulverised, non-agglomerated	0.38	-36	Not designated
74	22083010	Whiskies: In containers holding 2 li or less	0.38	-22	Not designated
75	85371090	Boards, cabinets and similar apparatus for electric control for a voltage <= 1.000 V: Other	0.36	-6	Not designated
76	84099990	Parts suitable for use solely or principally with diesel or semi-diesel engine, n.e.s.: Other	0.36	12	Not designated
77	84089090	Compression-ignition internal combustion piston engine “diesel or semi-diesel engine”: Other	0.35	6	Not designated
78	87089490	Steering wheels, steering columns and steering boxes, and parts thereof	0.34	2	Not designated
79	90318000	Instruments, appliances and machines for measuring or checking (excluding optical)	0.34	6	Not designated
80	84749000	Parts of machinery for working mineral substances of heading 8474, n.e.s.	0.34	4	Not designated
81	90183900	Needles, catheters, cannulae and the like	0.34	15	Not designated
82	84314300	Parts for boring or sinking machinery	0.34	17	Not designated
83	84807100	Injection or compression-type moulds for rubber or plastics	0.33	318	Not designated
84	48115990	Paper and paperboard (excl. bleached and weighing > 150 g/m <sup>2</sup> , and adhesives): Other	0.33	36	Not designated
85	90211000	Orthopaedic or fracture appliances	0.32	72	Not designated
86	84223000	Machinery for filling, closing, sealing or labelling bottles, cans, boxes, bags or other containers	0.32	-13	Not designated
87	84729000	Office machines, n.e.s.	0.31	103	Not designated
88	71023900	Diamonds, worked, but not mounted or set (excluding industrial diamonds)	0.31	-28	Not designated

RANK	HS CODE	PRODUCT DESCRIPTION	IMPORT VALUE, RAND BILLION	CHANGE IN RANK Q1 2019 – Q1 2020	DESIGNATION STATUS
89	38170010	Mixed alkylbenzenes and mixed alkylnaphthalenes	0.31	47	Not designated
90	85258090	Television cameras, digital cameras and video camera recorders: Other	0.31	32	Not designated
91	49019900	Printed books, brochures and similar printed matter	0.30	-2	Not designated
92	39069090	Acrylic polymers, in primary forms	0.30	10	Not designated
93	84148000	Air pumps, air or other gas compressors and ventilating or recycling hoods incorporating a fan	0.30	33	Not designated
94	33029090	Mixtures of odoriferous substances and mixtures, incl. alcoholic solutions: Other	0.30	11	Not designated
95	84219990	Parts of machinery and apparatus for filtering or purifying liquids or gases: Other	0.30	26	Not designated
96	84271000	Self-propelled trucks fitted with lifting or handling equipment, powered by an electric motor	0.30	-21	Not designated
97	33030090	Perfumes and toilet waters	0.30	36	Not designated
98	29349900	Nucleic acids and their salts, whether or not chemically defined	0.30	-30	Not designated
99	79011100	Unwrought zinc, not alloyed, containing by weight >= 99,99% of zinc	0.29	8	Not designated
100	90328900	Regulating or controlling instruments and apparatus	0.29	-8	Not designated