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## RESEARCH ARTICLE

### THE INFLUENCE OF THE COVID-19 VIRUS ON THE TEXTILE INDUSTRY IN 2020

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#### ABSTRACT

The sales of Textile Flooring's Market are expected to decelerate in 2020 as COVID-19 pandemic takes its toll on the global market. On March 5, 2020 retailers' top priority has been the global spread of COVID-19 in recent weeks, which had a direct effect on the health and safety of their workers and customers. Those concerns early in the year steered many retailers, to close their stores within China and constrain employee travel. Several weeks later, the virus has reached the U.S and other countries outside China, with 93,000 cases tracked worldwide as of March 4, 2020 according to the World Organization. Many details about the disease, which has flu-like symptoms remain unknown, and health officials are still investigating how far and for how long it might spread. But as more cases of the disease have been reported globally, problems for the textile industry have materialized as factories closed and workers could not report to work. Orders were cancelled, and production stopped. This Research paper will investigate the crisis of COVID -19 and its influence on Textile Industry in 2020.

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#### INTRODUCTION

On April 7, 2020 it was announced that the global sales of textile floorings are estimated to reach US\$ 109.7 Bn by 2016 end, witnessing a growth of 4.8% over 2015. Carpets segment is expected to continue to account for major share in the textile floorings in 2016, to account for 90.7 %, up from 90.5 % in 2015 [<https://www.marketwatch.com/press-release/sales-of-textile-floorings-market-to-decelerate-in-2020-as-covid-19-pandemic-takes-its-toll-on-global-market-2020-04-07>]. Demand for tufting technology, which offers lower manufacturing cost, as well as easy installation and ease of use by consumers, is expected to continue to increase over the forecast period (2016-2026). Among material types, synthetic textiles segment is expected to remain dominant, accounting for US\$ 93 Bn by 2016 end. Mohawk Industries Inc., Shaw Industries Group Inc., Tarkett S.A, Beaulieu International Group N.V, and Interface, Inc. are the major players in the global textile floorings market, accounting for 12.0% market revenue share in 2015. Leading players in the market are focusing on increasing acquisitions of regional manufacturers in order to enhance their operations with minimum capital expenditure, thereby strengthening their value chain. Based on the application, residential segment accounted for the largest share in terms of revenues in 2015 and it is estimated to remain

the same in 2016. Residential segment is estimated to account for US\$ 69.2 Bn in 2016, an increase of 5.1% over 2015. Asia Pacific Excluding Japan (APEJ), is the largest market for textile floorings. The market in the region is estimated to be valued at US\$ 35.8 Bn by 2016 end. Increasing construction activities and infrastructure development in countries such as China, India, ASEAN countries and MEA, which are few of the most lucrative markets globally, is expected to provide an impetus to the demand for textile floorings. In addition, to be the largest market in terms of revenue and volume consumption, APEJ will continue to remain the fastest growing market globally. The growing construction industry in the U.S. and Asia Pacific region is estimated to drive the demand for textile floorings in 2016. Revival of residential construction sector in the U.S. and improving infrastructure facilities in developing regions are expected to boost demand for textile floorings. While the EU economy remains shrouded in uncertainty; steady growth of the construction sector in Western Europe is expected to continue creating growth opportunities for textile floorings manufacturers. The Denim industry, which is one major textile used around the world in fashion every season has also been affected by the COVID-19. This research paper will investigate the Textile Industry and how COVID-19 influenced this market in addition to the retail sector.

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**The Clothing and Textile Sector Feels Covid-19 pressure:**  
The effect of the Covid-19 lockdown on SA's battered clothing and textile sector comes under the spotlight when Business

Day TV's Michael Avery (Fig 2) talks to the National Clothing Retail Federation executive director Michael Lawrence; OrganiMark MD Heinrich Schultz; and the Southern African Clothing and Textile Workers' Union coordinator Fachmy Abrahams about how the industry has already been negatively affected by a flood of cheap imports from the Far East.

#### **How the denim Textile Industry will Evolve after Covid-19:**

The spreading of COVID-19 is having a direct impact on the global textile industry. Amy Wang, the general manager of Advance Denim in China (Fig 1) said: "Among consequences coronavirus will bring in the Jeanswear and fashion market there will be an impact on new fabric requirements, styles and sales models. For instance, we have introduced bio-antibacterial and environmentally safe denim fabrics. Meanwhile, brands will implement a variety of online sales methods. In terms of quantity, especially in China, the traditional offline sales or the sales without features will be bleak in the first half of 2020, while the influence on online sales will be much less and will gradually improve in the second half of 2020. Some dynamics, timings and deliveries may change in the fashion, garment and Jeanswear production according to single factories' situation. Wuhan will be mostly affected, while there has been less impact on the fashion, clothing and denim clothing in China's Guangdong and Zhejiang. Most of the non-Hubei-registered large enterprises have resumed production and maintained their delivery plans as very few people got sick in many other areas with the exception of Hubei, but the restrictions on logistics in some countries or places have affected the delivery" [<https://www.sportswear-international.com/news/stories/Business-How-textile-and-fashion-industry-will-evolve-after-Covid-19--15222>].

Francesca Polato, the marketing manager of Berto, Italy said: "It is unfortunate that the coronavirus is having a devastating impact on the market in general, from small shops to big multinational companies". As the fashion market is also involved in this really bad situation. Before the problem was bounded in China. since the end of February, Italy is heavily involved. Tolga Ozkurt, deputy general manager, sales & marketing of Calik in Turkey said: "Due to millions of people stuck indoors, a huge decrease of sales negatively affects all rings of the chain in the textile industry. Sales are decreasing, production slows down, platforms with crowded masses like exhibitions and events are canceling and so on. But everybody should stop for a moment and realize that this is a crisis that can be managed, and business has to continue as usual" [<https://www.sportswear-international.com/news/stories/Business-How-textile-and-fashion-industry-will-evolve-after-Covid-19--15222>]. Digitization, which has a wide place in our lives in recent years, is gaining serious importance today. We are using technology-based solutions such as video and teleconferencing to mitigate the effects of this pandemic. We stopped our domestic and international travels for a while. We conduct all our meetings through digital platforms. "Several runway shows were cancelled in New York, London, Milan and Paris. Shanghai fashion week was postponed, and some of the biggest names in the industry are publicly counting the cost of coronavirus-related disruption on bottom lines. A number of designers dropped out of Paris Fashion Week, including Chinese brands Shiatzy Chen, Calvin Luo, Masha Ma, Maison Mai and Uma Wang. Additionally, LVMH Moët Hennessy Louis Vuitton canceled a reception for its 2020 LVMH Prize for Young Fashion Designers [<https://www.nytimes.com/2020/02/14/business/coronavirus-luxury-retail.html>].

#### **Bangladesh Textile and Apparel Industry During COVID-19:**

The Coronavirus epidemic poses a threat to the country's apparel sector, as foreign buyers have started revising their business strategies amid the prevailing critical situation. Bangladesh Garment Manufacturers and Exporters Association (BGMEA) reported that more than one thousand RMG factories had received order cancellation or shipment delay notices from the buyers for export orders worth almost US\$3 billion. It is affecting more than 1.44 million workers [4]. Now Bangladesh, USA, China, Italy, Spain, France and other European countries declared nationwide lockdowns as the countries took sweeping measures to reduce the spread of the coronavirus. Following the lockdowns, major brands in Europe, including Primark and Inditex, shut their stores in the countries and asked Bangladeshi suppliers to hold shipment of ready garments for another two to four weeks. Global buyers are not only canceling and suspending orders but also, are not taking ready goods. Fazlee Shamim Ehsan, Director of the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), said the prices of basic raw materials, including sewing thread and level yarns used in production, are high due to the virus outbreak. However, Chinese suppliers, after resuming their operation partially, have started communicating with local factories. He also requested to every manufacturer of our country to shut down their work from 26 March to 4 April [<https://www.textiletoday.com.bd/bangladesh-textile-apparel-industry-covid-19/>].

#### **India's Textile Industry Revolving Under COVID-19 Impact:**

Many factories in India have been shut due to the COVID-19 crisis. Many workers have been paid their last month salary and have been asked to go home, not knowing if the factories will reopen again. As nationwide 21-day lockdown to contain the pandemic has resulted in unprecedented chaos in this sector. The India's textile sector is the next biggest employment generator in the country. It employs over 105 million people [6]. The pandemic came at a time when the sector was battling slow-moving growth. As eleven countries buy 41 percent of India's cotton yarn exports and these countries have reported COVID-19 cases, according to the Cotton Textiles Export Promotion Council (Texprocil), in value terms, yarn exports are down 30 percent in January-February against a year ago. Cotton yarn exports to China, Iran, Korea and Vietnam have seen a steep decline. The US and the Europe are the two largest markets for Indian textile exporters. Both are collapsing with new cases daily. The pandemic has killed more than 50,000 people worldwide, with nearly three-quarters of the deaths being reported in Europe. US has reported over 10,000 deaths. UK has announced a six-month lockdown while most of USA has social distancing and quarantine measures, with stay-at-home orders for more than a third of the population [6]. It was predicted that the India's Q1 textile-apparel production will fall 10-12%: KPMG as production in the Indian textile-apparel sector is expected to fall by 10-12 per cent in the April-June quarter because of the COVID-19 outbreak [7]. Man-made fiber imports are expected to rise significantly, resulting in higher price for some goods in the domestic market. All India Manufacturers' Organization (AIMO) estimates that about a quarter of over 75 million micro, small and medium enterprises (MSMEs) in India will close if the lockdown goes beyond four weeks, and this figure is estimated to touch a whopping 43 per cent if the situation extends beyond eight weeks, added the KPMG study [<https://www.fibre2fashion.com/news/company-reports-news/india-s-q1-textile-apparel-production-to-fall-10-12-kpmg-266298-newsdetails.htm>].



Fig. 1. Amy Wang, Advance Denim



Fig. 2. The Coronavirus epidemic poses a threat to the country's apparel sector, as foreign buyers have started revising their business strategies amid the prevailing critical situation

**COVID-19 Hurts Textile Exporters:** Textile experts have started to feel the impact of Covid-19 because of supply chain disruptions, fall in exports and cancellation of international events. According to the Cotton Textiles Export Promotion Council (Texprocil), 11 countries buy 41 per cent of India's cotton yarn exports and these countries have reported Covid-19 cases. Yarn exports are down 30 per cent in value terms in January-February 2020 compared with a year earlier. There is a sharp fall in cotton yarn exports to China, Iran, Korea and Vietnam. Exporters are unable to get appointments from buyers for Market Week 2020 to be held in New York later this month, pointed out Siddhartha Rajagopal, executive director of the council. In the case of home textiles, the biggest markets include France, Germany and the U.S. China is the largest supplier and India can tap opportunities for specific products," he said [<https://indiantextilejournal.com/latest-textile-industry-news/COVID-19-hurts-textile-exporters>].

**ITMF Survey on Impact of Corona on Global Textile:** The International Textile Manufacturers Federation (ITMF) has conducted a survey among ITMF Members about the impact the Corona pandemic had on the global textile value chain, especially on current orders and expected turnover in 2020. In total 34 companies from around the world participated in addition to two national textile associations with several hundred participants (Fig 3 & 4). The results came to the following: Worldwide, current orders are down by -8%.

The results show that on average companies in all regions of the world suffered significant numbers of cancellations and postponements. On world average, current orders dropped by -8.0%. The decrease in orders ranges from -4.0% in South America to -13.3 per cent in Africa. Worldwide, expected turnover 2020 vs. 2019 is down by -10.5%. The results show that on average companies in all regions are expecting their turnovers in 2020 to be significantly lower than in 2019. On world average, the turnover in 2020 is expected to be -10.5 per cent lower than in 2019. While in North America the expected plunge will be on average -7.5 per cent, companies in Europe are expecting a drop of -17.5 per cent. Two factors played an important role in the survey that are also interconnected with each other. These are geography and time. Those companies that had replied early (between March 13-16) and reported about additional orders were not (yet) directly or indirectly effected by the Corona-pandemic. With other words, these companies were neither affected by a Corona epidemic in their own country, nor were their customers (mainly in Europe and North America). The later replies were received (from March 17 onwards), the more negative were the answers across all regions. It can be assumed that the fact that after March 16 more and more governments in Europe and North America introduced almost daily new regulations that were restricting public and business life [<https://indiantextilejournal.com/latest-textile-industry-news/ITMF-survey-on-impact-of-Corona-on-global-textile>].

**Corona virus Impact on Textile Industry:** The COVID-19 disease has been disturbing every aspect of life including manufacturing activities, production, and businesses across the globe. India had also had its panic situation. As the textile industry mostly employs migrant workers from different states, a large population use public transportation to reach their workplaces. However, with the current preventive measures being taken and awareness created by the Government to fight against the Coronavirus pandemic, the majority of the workers are not able to report to work, or use transportation, and most of them have returned to their native places. This situation has resulted in the slowdown of production, or even a shutdown of the production facilities. The retail and the textile industries are facing extraordinary losses and many businesses are in massive need for immediate financial relief to alleviate the crisis.

Therefore, the textile industry is in a speedy help to deal with the worst ever crisis being faced by the industry [<https://indiantextilejournal.com/best-stories/Coronavirus-impact-on-textile-industry>]. Indian's government suggests that the India's economic growth could take a hit of up to half a percentage point in FY21 because of the production disruptions caused by the Covid-19 outbreak as the virus has infected more than 207,800 people and killed over 8,600 people globally, according to the World Health Organization, and India has been severely impacted. The economy is forecast to grow 5 per cent in current fiscal, the slowest in 11 years. The Economic Survey had forecast 6 to 6.5 per cent rise in FY21, but Covid-19 has hurt recovery prospects. The outbreak has equally affected the textile and apparel industry, where India and China play a core role in the global supply chain [<https://indiantextilejournal.com/best-stories/Coronavirus-impact-on-textile-industry>].

**Virus War & Textiles Sector:** The textile sector has received requests from governments to produce necessary items such as face masks, and personnel protective equipment and sanitary

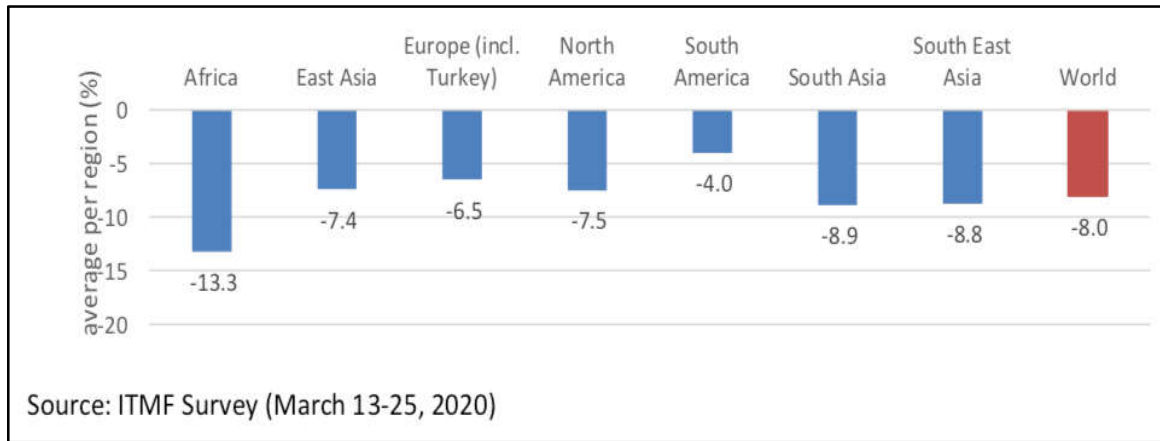


Fig. 3. ITMF Survey results on Corona-Pandemic's impact on orders, March 13-25, 2020

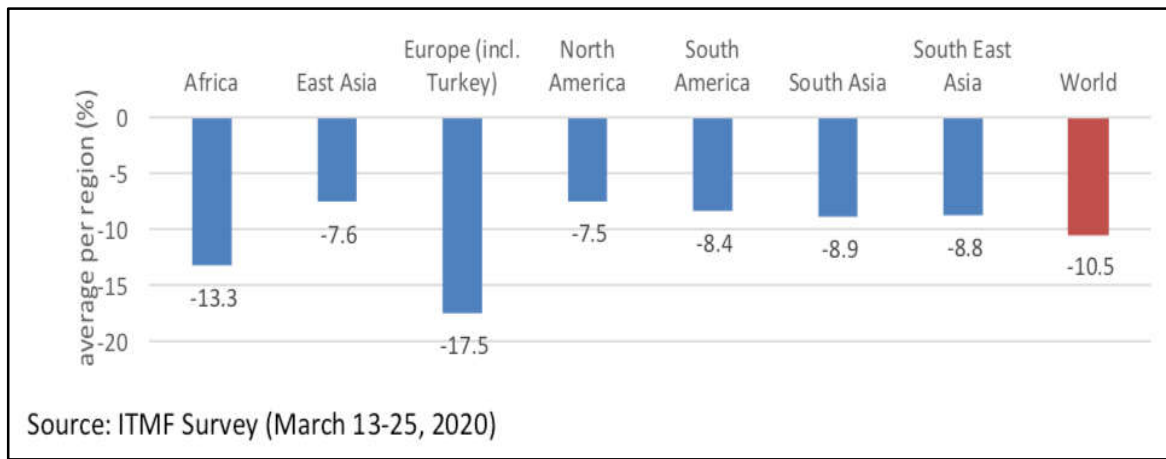


Fig. 4. ITMF Survey results on Corona-Pandemic's impact on turnover, March 13-25, 2020

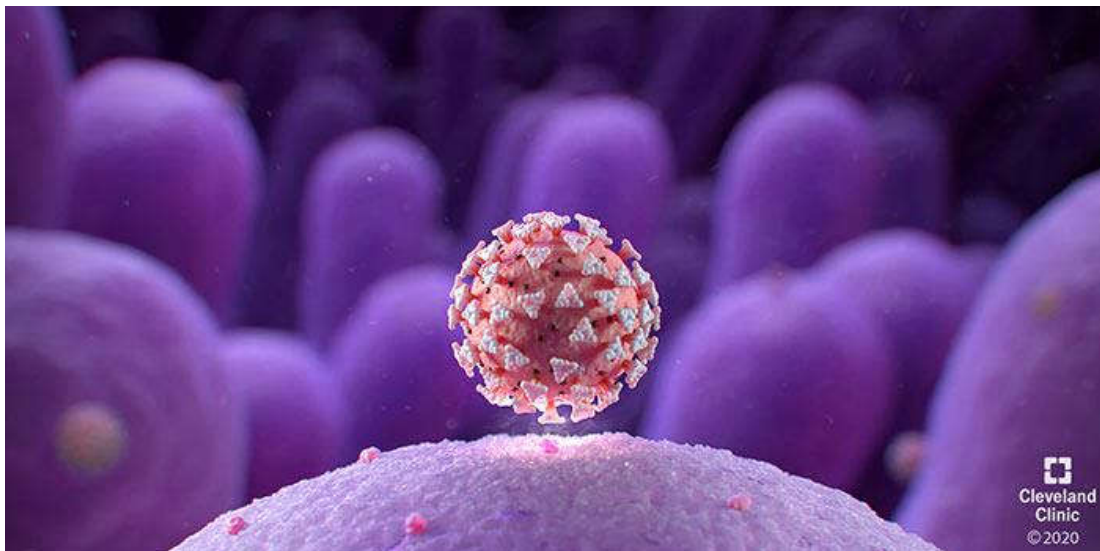


Fig. 5. A close-up of COVID-19 from Cleveland Clinic, 2020

wipes. Major manufacturers like Nike, Apple to small business entities like Chantilly-based First Line Technology, LLC have set their efforts to deliver preventive supplies. The apparel industries started to create masks. Hanes Company has come-up with a 3-ply cotton structure that can be used as masks. 3M Company has doubled its global production of N-95 respirators to 1.1 billion, with a monthly production of 100 million. University laboratories have also contributed to the great cause in the fight against COVID-19 (Fig 5) and are using their 3-D

printing capabilities and machine tool laboratories to develop face masks and face shields, in addition to producing gloves [<https://indiantextilejournal.com/latest-textile-industry-news/Virus-war--textiles-sector>].

**Louis Vuitton Is Now Producing Face Masks:** Louis Vuitton hopes to produce 100,000 masks a week for use by its staff and nearby retirement homes during the coronavirus crisis [<https://www.thecut.com/2020/04/louis-vuitton-is-now-producing-face-masks.html>].



**Fig. 6. Louis Vuitton is producing masks.**  
Photo: Courtesy Louis Vuitton



**Fig. 7. PETA pushes for bans on wool, mohair and cashmere /**  
Photo is a courtesy of PETA



**Fig. 8. Manufacturing Purchasing Managers Index, March 2020 /**  
Courtesy of National Bureau of Statistics of China

Many major Luxury brands have turned their factories to production facilities to produce masks to help in the fight for COVID-19. Louis Vuitton has reopened 12 of its 16 leather goods production sites in the country with the aim of producing hundreds of thousands of masks for its staff and nearby retirement homes. Michael Burke, chairman and chief executive officer of Louis Vuitton, visited the Sainte-Florence workshop in the Vendée department in the west of France and reported that 115 out of 896 employees were back at work to produce disposable and recyclable masks [https://wwd.com/fashion-news/designer-luxury/louis-vuitton-reopens-french-leather-goods-production-sites-to-make-masks-in-coronavirus-fight-1203557187/].

**PETA buys stock in Ralph Lauren, Urban Outfitters and Others:** Animal rights group PETA has taken advantage of the COVID-19 stock market recession and has purchased stock in nearly two dozen fashion companies, including Ralph Lauren, Urban Outfitters and Guess. This strategic action was taken by the organization to be able to have influential decisions made by clothing companies. PETA frequently purchases the minimum number of shares necessary to attend annual meetings, liaise with shareholders, and persuade management decisions. PETA confirmed that its decision to purchase stock in Ralph Lauren, Urban Outfitters and Guess was motivated by its goal to put an end to the use of wool, mohair and cashmere in clothing products [https://fashionunited.uk/news/fashion/peta-buys-stock-in-ralph-lauren-urban-outfitters-and-others/2020040848397].

**China Factory Index Hits Record Low on Coronavirus:** Manufacturing activity in China plunged in February 2020 as the coronavirus became a major crisis. The manufacturing purchasing managers' index, one of the first official economic indicators published since the coronavirus outbreak, fell to 35.7 in February 2020, an all-time low and down from 50 in January 2020 [16]. China's National Bureau of Statistics announced that the figure below 50 indicates a contraction in activity compared with the previous month, as judged by the managers who fill in the PMI survey. In March 2020, China's manufacturing PMI was 52.0 percent, up by 16.3 percentage points from last month. In terms of enterprise scale, the PMI of large, medium and small enterprises was 52.6, 51.5 and 50.9 percent respectively, 16.3, 16.0 and 16.8 percentage points higher than that of last month. According to the classification index, the five sub-indices composing PMI, the production index, new orders index and employment index were all above the threshold, while main raw materials inventory index and supplier distribution time index stayed below the threshold (Fig 8).

## Conclusion

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory system. The disease was first identified in December 2019 in Wuhan the capital of China's Hubei province, and has spread globally, resulting in the ongoing 2019-20 coronavirus pandemic. The Common symptoms include fever, cough and shortness of breath. Other symptoms may include fatigue, muscle pain, diarrhea, sore throat, loss of smell and abdominal pain. While the majority of cases result in mild symptoms, some progress to multi-organ failure that may cause death. As of April 7, 2020, more than 1.35 million cases have been reported in more than 200 countries and territories, resulting in more than 74,800 deaths, however, more than 285,000 people have recovered. As the world economy is suffering tremendously, the Textile Industry has felt the pain as well as the retail market. The shutdown of factories has stopped production as workers were not able to report to work. The spreading of COVID-19 had direct impact on the global textile industry as Amy Wang, the general manager of Advance Denim in China said that there will be a need to introduce new material such as bio-antibacterial and environmentally safe denim fabrics. Bangladesh Garment Manufacturers and Exporters Association (BGMEA) reported that more than one thousand RMG factories had received order cancellation or shipment delay notices from the buyers for export orders worth almost US\$3 billion. It is affecting more than 1.44 million workers.

It was predicted that the India's Q1 textile-apparel production will fall 10-12%: KPMG as production in the Indian textile-apparel sector is expected to fall by 10-12 per cent in the April-June quarter because of the COVID-19 outbreak. The International Textile Manufacturers Federation (ITMF) has conducted a survey among ITMF Members about the impact the Corona pandemic had on the global textile value chain, especially on current orders and expected turnover in 2020. The results varied depending on the timing the survey was taken. On world average, current orders dropped by -8.0%, and Worldwide, expected turnover 2020 vs. 2019 is down by -10.5%. The economy is forecast to grow 5 per cent in current fiscal, the slowest in 11 years. The Economic Survey had forecast 6 to 6.5 per cent rise in FY21, but Covid-19 has hurt recovery prospects.

Many Luxury brands had turned their factories into production facilities to produce masks and medical supplies, like Louis Vuitton who will produce 100,000 masks per week for use by its staff and nearby retirement homes during the coronavirus crisis. On the contrary, the animal rights group PETA has taken advantage of the COVID-19 stock market recession and has purchased stock in nearly two dozen fashion companies, including Ralph Lauren, Urban Outfitters and Guess. Its target was to play a role in the decision making of these companies as it pushes for bans on wool, mohair and cashmere. China Factory Index hit record low on coronavirus according to the National Bureau of Statistics of China, it fell to 35.7 in February 2020.

#### Declaration

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#### Limitations of the Study:

- No Academic research was done on this topic since it is very new, and the news are updated on daily basis
- The lack of knowledge in the medical research in the fight for COVID-19 may change the predictions

#### Recommendations

- To keep following the news on daily basis and find the updates
- Many solutions and online initiatives are being done on daily basis that may change the outcomes of the financial predictions
- The situation in China may affect the Textile production and exports
- Finding a vaccine, or a cure to the COVID-19 may change the listed facts in the research

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