



Impact of COVID-19 on Cotton and Textile Industries in Egypt

Mohamed Negm

Cotton Research Institute 9 Gamaa St. 12619-Giza-Egypt



Dr. Mohamed Negm: Professor of cotton technology, Cotton Research Institute, Giza-Egypt. Dr Negm is CEO of cotton marketing committee in Egypt for the current season 2020-21; chair of the Research Network on Cotton for the Mediterranean & Middle East Regions-ICAC; vice Chairman of International Cotton Researchers Association-ICRA and inventor for a patent on: Developing a DNA-Based Technology for Identifying the Presence of Egyptian Cotton Fibre in Various Textile Products. He has special expertise in cotton and textile sectors, measurement and interpretation of fibre properties, marketing issues, processing efficiency, quality control and policy. Dr Negm received 'Encouragement Nation Award 2005', in Advanced Science Technology, Academy of Scientific Research and Technology.



Egyptian cotton

Introduction

It is a battle with an invisible enemy. The virus that started in China's Wuhan Province has now affected almost all parts of the world and has created one of the worst periods in human history. Almost all major economies, including the United States, China, India and Europe, have been disrupted and many countries are under complete or partial lockdown. The pandemic has shaken up both the human race and the economies of the world. The impact of the COVID-19 pandemic is rippling through the major cotton economies. Textile manufacturing and trade has been the worst hit, while demand for food commodities hasn't been hit as badly as the demand for textiles and clothing. It is possible that in the next few months the negative effects of COVID-19 on the textile sector will permeate through the globe, in the form of unemployment and economic slowdown.

The coronavirus disease COVID-19 is caused by a severe acute respiratory syndrome coronavirus abbreviated as SARS-CoV-2. The impact of COVID-19 on human lives and the business economy is staggering. Scientists around the world are working tirelessly to understand this RNA virus and how they can control it. In the absence of a cure or vaccine, the best way to keep COVID-19 under check is to contain the spread of the virus. The RNA based detection technology RT-PCR "reverse transcription polymerase chain reaction" in combination with 'Real-Time PCR' is being widely used to detect, quantify and precisely trace the location of COVID-19 infected persons and subsequently aid in restricting its spread. The more people that are tested for COVID-19, the better it is for controlling the spread of the virus. In addition to advanced RNA based technology, the antibody-based enzyme-linked immunosorbent assay (ELISA) is also widely used in the agricultural sciences to detect plant viruses. Though this technology is still useful, it is rapidly being

replaced by DNA/RNA technologies that are more sensitive and specific.

Virus epidemics in agriculture

Agriculture has also encountered similar kinds of new and emerging viral diseases. The methods to detect them are not all that dissimilar from the ones used to detect human viruses. Though plant viruses do not have such a direct impact on humans as COVID-19, they can be very devastating to a grower's crop. Sometimes the entire crop is lost. Like COVID-19, if unchecked, plant viruses can also become pandemic and cause severe damage to the agribusiness around the world. Currently, cotton fields in different parts of the globe encounter emerging viral disease called Cotton geminiviruses. The geminiviruses cause cotton leaf crumple disease (CLCrD) and cotton leaf curl disease (CLCuD). Leaf crumple is found in the Southwestern USA, Central and South America, while leaf curl has been described in Africa and Asia. These viruses are quite different when the DNA sequences are compared and produce different symptoms in the field. Leaves on cotton plants infected with CLCuD, curl upward, have swollen veins, and enations growing out from the leaf nectaries. Leaves on CLCrD infected plants, in contrast, curl downward giving the crumpled effect. In addition, enations may be present on flowers of leaf crumple infected plants. While both viruses can cause severe losses when infections occur on young plants, lint produced on leaf crumple infected plants, even though reduced in quantity, is not affected in important quality parameters. Leaf curl infected plants produce no useful lint. There are many plant species that harbour the geminiviruses but are asymptomatic. As seen

in the news every day, COVID-19 infected humans can also be asymptomatic. Another similarity between the plant virus diseases and COVID-19 is that there is no reliable cure for either of them.

The impact of COVID-19 on cotton growers, traders and textile industries

World cotton growers and traders were just clawing back from a tough year in which the U.S.-China trade war sent prices plummeting. Now the coronavirus pandemic has set the clock back again to a tough phase. Over the past few months major global economies such as China, Europe and United States have been experiencing immense pain and suffering. The impending economic slowdown invariably leads to a decline in the demand of discretionary products such as textiles and clothing. Thus, from an economic point of view, the future of the textile industry is a major concern for the millions across the world whose livelihood depends on the industry. The demand for textile products abroad and domestic sales have come down to a grinding halt due to the panic situation created by the COVID-19 outbreak. Due to the lockdown, the cotton value-chain industries, the textile-related factories and shipment of raw materials are closed and it is tough to hazard a guess as to when these will be allowed to open. Livelihoods have been destroyed and workers are traumatised amid the confusion. The business community is scared because of cash crunch, supply chain disturbance and manpower-related issues.



Figure 1. Fibre quality testing

Cotton futures on the Intercontinental Exchange were trading at their lowest levels since 2010. In last March 2020, with the most-active futures contract trading down

2.3%, to just below 54 cents a pound. Since the start of the year, they have shrunk by 23%.

Cotton growers and traders were hoping that prices would post a sustained recovery after a cease-fire in the two-year trade war that roiled markets world-wide.

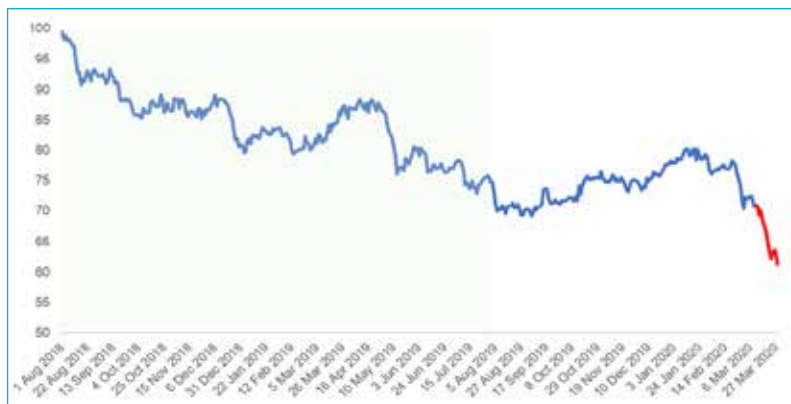


Figure 2. Impact of Trade disputes, economic slowdown and COVID-19 on Cotlook-A Index:

Cotton trade has been badly affected by coronavirus internationally. Local textile mills and ginners are still in distress. Textile mills in many parts of the world are shut down after the building up of inventories as a result of suspension of export orders from abroad.

Figure 3. Stocks have been piling up across the world

To make matters worse, major international importers, especially the big American and European importers of textile had hinted of cancelling the orders and stopping of shipments due to which textile mills were in distress. Though some mills had started working, partially though, there is a lack of clarity on whether the textile products would regain demand. Due to the closure of mills, unemployment has been increasing. Textile mills were facing double losses due to the extraordinary delays in shipments and cancelling of orders. Thus, coronavirus is forcing clothing retailers to shut stores world-wide. There has been no business in the local cotton markets due to coronavirus. However, Cotton market associations worldwide haven't suspended their operations in the international markets and spot rates have been issued regularly.

The global stocks are expected to increase to an all-time high of 21.6 million tonnes, with record stocks in the US, India, Pakistan and Turkey. However, the main problem is with the textile demand that has shrunk to a low. In Egypt, the area of cotton production is expected to fall by 30% in 2020 to 120,000 hectares. In China, business has revived back to near normalcy, but there is uncertainty in the global cotton market. In India, too, the coronavirus is hampering business operations, but the minimum support price has been effectively shielding farmers from the declining



Figure 3. Egyptian cotton in bloom

market prices. Manufacturers worldwide are trying hard to keep factories operational as the coronavirus pandemic threatens one of the biggest disruptions in memory to supply chains, staffing and demand.

Factories are staggering shifts, banning visitors and installing barriers between workers to protect them from infection. Some executives worry that these measures reduce the staff strength and thus might not be enough to maintain production, especially since more and more people are forced to stay at home to take care of their children because schools and day-care centres are shut down.

According to a recent survey conducted by the International Textile Manufacturers Federation (ITMF) of 600 companies, by the mid of June 2020 the current orders of textiles have dropped 42 percent on average globally, and the expected global turnover in 2020 declined by 32 percent compared to 2019.

workers have been able to work from home and continue with their incomes. The vast majority of the global population has not only lost its income and livelihood, but also lost its purchasing power, which invariably results in a global economic slowdown. Thus, the current global economic system is bound to crumble in the short term, while it is also possible that new economic systems could evolve as societies might discover ingenious ways in the process of recovery from the pandemic shock.

Populations under stress are likely to accept any form of government support, control and regulations if they are convinced that these measures would help them overcome the crisis. Government support measures include guaranteed income schemes and business loans. As the pandemic continues its tirade on global health, it will not be surprising to expect new obstacles in transfer of movement from one country to another, which would only aggravate the economic crisis.

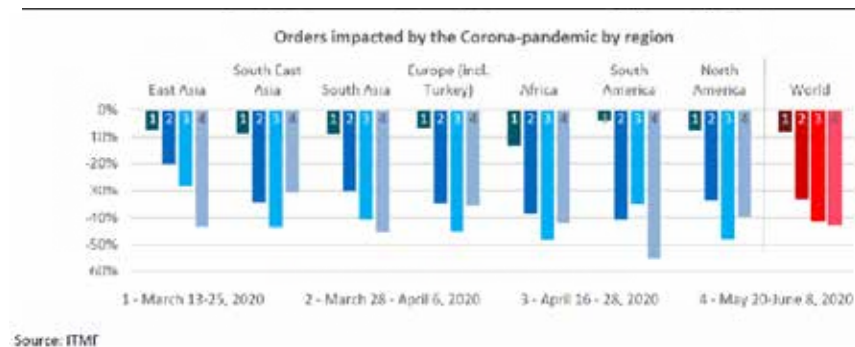


Figure 4. COVID-19 pandemic's impact on orders

The near future

COVID-19 has changed everything. The world tomorrow will not be the same as it was before COVID-19. The globe went into a kind of stupor. The lockdowns have hit the earnings of the working class whereas the white-collared

Cotton textiles mean livelihood and employment. The COVID-19 pandemic has hit the cotton sector probably more than it hit any other. Global pandemics are not new to the world; neither are economic slowdowns. However, the whenever the world encountered difficult times, it is the underprivileged and weaker sections of the society that are always the worst affected. The world continues to combat challenges and has always been able to tide over recurrent crises. The world is still under the grip of the pandemic. A few countries have started their journey

of recovery. In the journey of revival, the world would be a better place if the recovery brings back employment and livelihood back to the poorer sections of the society that are below the poverty line, especially in the least developed countries of the world.