

# Potential Effects of COVID-19 on the Cotton Sector: A General Perspective

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Figure 1. Cloth Face Masks to prevent COVID-19 infection



#### Introduction

The story of the severe acute respiratory syndrome coronavirus (SARS-CoV-2) and the novel coronavirus disease 2019 (nCO-VID-19) that it causes, is one that resembled a developing whirlwind. COVID-19 gathered momentum and lethal power across the globe with each new day. More than 8.5 million were infected and over 457 thousand people were killed during the six-month period from January to 20 June 2020. A pandemic of this magnitude is unprecedented. Extraordinary containment measures were instituted by governments across the globe; these measures have affected every pillar of human existence including religion, commerce, science, tourism, and agriculture. In agriculture, the cotton industry would not be an exception. Cotton is a world-wide commercial crop that is highly traded and is vulnerable to world socio-economic instability. In recent years competing cash crops, alternative synthetic fibres, high production costs, and climate issues contributed to increased vulnerability of cotton. COVID-19 caused global socio-economic instability and would shake the cotton sector considerably. A reflection on the potential effect of the COVID-19 pandemic on the cotton sector is compelling.

# The Scope for Coronavirus Containment

The unobtrusiveness, aggressiveness, and lethality of COVID-19 have led nations to respond with decisive painstaking mitigation measures. The list of measures that were taken to target coronavirus spread can be quite long; thorough washing/sanitizing of hands with anti-germs and or soap, face-masking, enforcing lockdown to confine people in homes and countries, closure of schools, colleges and universities,

social distancing, prohibiting large gathering, shutting-down of "non-essential" services, and, national and international travel restrictions are a few cases in point.

# Potential Effect on Cotton Production

When coronavirus was first record in Southern Africa, for instance, cotton crops had already reached the reproductive stage. At that stage of cotton, effective pest control is critical otherwise loss of fruiting structures will certainly cause reduction in yield and income. The physical interaction between the crop and the farmer normally is at its highest at the peak boll formation stage. Crop-pest dynamics needed to be monitored closely. The crop required "baby care". Farmer pre-occupation with need to survive the pandemic had the potential to cause lapses in crop management at the critical growth stage that could have resulted in compromised crop performance.

# Disruption of National and Global Supply Chains of Agricultural Inputs

International restriction on air, sea and road transport had the potential to hinder the global agrochemicals market. Equally affected could be packaging materials supply chain at a time when cotton sectors in the Southern Africa region get ready for marketing. Packaging materials are largely imported into the region. Countries that are net importers of the inputs would be severely handicapped. Even in countries where agricultural inputs are manufactured, lockdown could have caused manufacturers to shut down without prior warning to retailers to enable restocking.

### COVID-19 Pandemic Presents Complications in Preparing for 2020/21 season

Activities such as cotton planting, seed-cotton harvesting, processing, packaging and supply, and manufacture and trade of inputs such as fertilizers, pesticides, and procurement of such inputs by the farmers could be complicated by imbalance in demand and supply. Input shortages affect future cotton and other crop production dynamics and productivity.

### **Effect on Fabric Consumption**

Demand for face masks notably increased consumption of cotton fabric. Cloth face masks (Figure 1) were reported to be particularly appropriate in circumstances where the risks of community-based transmission were high. Under conditions of restricted international trade, the local cotton fabric manufacturers are set to benefit against cheap imports that would be preferred under normal circumstances. Countries with large textiles industries that survived on exporting would experience decreases in fabric prices.

## Potential Rise in Costs toward Human Safety Needs

COVID-19 is not only scary, but deadly. Human resources need to be managed with extreme care in order to prevent infection. Additional care and costs need to be borne by the farmer for sanitizers, face masks, goggles and gloves. The potential risk of infection at all the stages of production and processing needs to be minimised at a cost which will have to be borne by farmers and stake-holders..

## Potential Increase in Availability of Labour

Cotton is a labour-intensive crop. Much of the COVID-19 trouble period coincided with the cotton-picking stage in the southern hemisphere and sowing operations in the northern hemisphere. Informal traders whose activities were ceased due to COVID-19 containment measures would have to turn to part time farm jobs as a means of livelihood. Closure of learning institutions released potential family labour; that has the effect of reducing hired labour costs.

## It is said that the Environment is The Winner from the COVID-19 Crisis

Environment is the natural capital that needs to be cared for. COVID-19 containment measures that indirectly limit chemical supply and use could enhance nature's self-healing, balancing and restoration processes. The farmers' health can be enhanced. Cost of production can be

"inadvertently" reduced. Is a De-chemicalized Integrated Pest Management (DIPM) system, something that is inconceivable in ordinary times, happening now? Such a system could promote build-up of naturally occurring biological control of pests through proliferation of parasitoids and predators.



Figure 2. A ladybird beetle preying on mealybugs

#### Conclusion

The spread and killing nature of COVID-19 continues unabated. The coronavirus is invading nations leaving social and economic scars that will last for very long. The full economic and social impact of the pandemic on the cotton industry is currently immeasurable and its end remains uncertain. The outlook is helplessly deteriorating. Governments may consider incentivising the cotton industry because production, processing, marketing and consumption patterns in the future are difficult to predict, if not impossible to determine. The detrimental effects of the COVID-19 pandemic on the cotton industry may not be quantifiable now because the rampage appears far from over. It is difficult to reliably forecast the global COVID-19 trends. Although dealing with coronavirus means dealing with life and death, efforts should be made towards minimizing disruption on cotton production and trade at local, regional, and international levels. Clearly, the world will not be the same hereafter; mankind will have to gear up towards caring and sharing, safeguarding lives and livelihoods; and in the process of recovery, ensure that the environment is protected well so that the possibilities of any future pandemics are minimised.