

MALCOTTON COMMENTARY

January - March 2017

Prepared by Cotton Unit at AICC

EMERGING GLOBAL ISSUES IN THE COTTON INDUSTRY: A MISSED OPPORTUNITY FOR MALAWI

Several emerging global issues will sharpen the future of the cotton industry in the World. This commentary looks at the opportunities that three key cotton global issues namely synthetic fibre boom, volatility of commodity prices, Bt cotton dominance and emerging pests pose to the cotton sector in Malawi and the economy as a whole.

Cotton from Africa and Malawi inclusive has relatively long fibres and is carefully picked by hand which makes it a high-quality raw material for textile and fabrics. This provides a rarely opportunity for the country to tap the unexploited niche market for conventionally bred cotton whose demand has been increasing yet the supply cannot match it as the world seeks to satisfy industrial demands through advanced technology. The quality of raw cotton is assessed by a number of different criteria. These include colour, purity, fibre length (staple), fineness, strength, and evenness. The decisive factor for the textile industry is fibre length, the longer the fibre, the higher the quality. There are four staple categories; short, medium, long and extra-long and Malawian cotton falls into the medium staple length category on average and this gives the country a wider market as the yarn produced can be used for a range of applications. India's textile companies have shown interest in trading with African countries unlike other regions owing to superior cotton which if carefully integrated can boost the economy. This was also echoed during the ICAC 75th plenary session in Pakistan in November, 2016 when Malawi was mentioned by India as one of the major sources of conventionally bred cotton. This market niche for conventionally bred cotton provides opportunities for countries like Malawi to exploit amid a plethora of emerging global issues in cotton such as synthetic fibre

boom, resurgence of new pests and the dominance of transgenic Bt technology.

COMPETITION FROM MAN MADE FIBRES (MMFS)

The upsurge of industrialization had shifted the demand of textile from natural fibres (such as cotton) to synthetic fibres (mainly polyester). Despite the shift, cotton remains a vital component in economies of many developing countries and the livelihoods of millions of small-scale farmers and low-wage workers hence its importance cannot be overlooked. At the rate at which synthetic fibres are being produced, cotton fibres continue to face a stiff competition on the world market with synthetic fibres which are cheaper to produce and exhibit a high level of design and freedom in research, making them attractive to makers of clothing. The synthetic fibre boom in the textile industry has detrimental impacts on the cotton subsector and countries that rely on cotton export trading for their overall GDP.

While demand for textile fibre has been growing globally since 1980s, only 8 percent of textile was annually used on a per capita basis worldwide. By 2012, this had risen to 12.2 kilograms, a 53 % increase in per capita use. In 2015, a total of 85.8 million tons of textile fibres were produced worldwide depicting a tremendously increase in demand of the product.

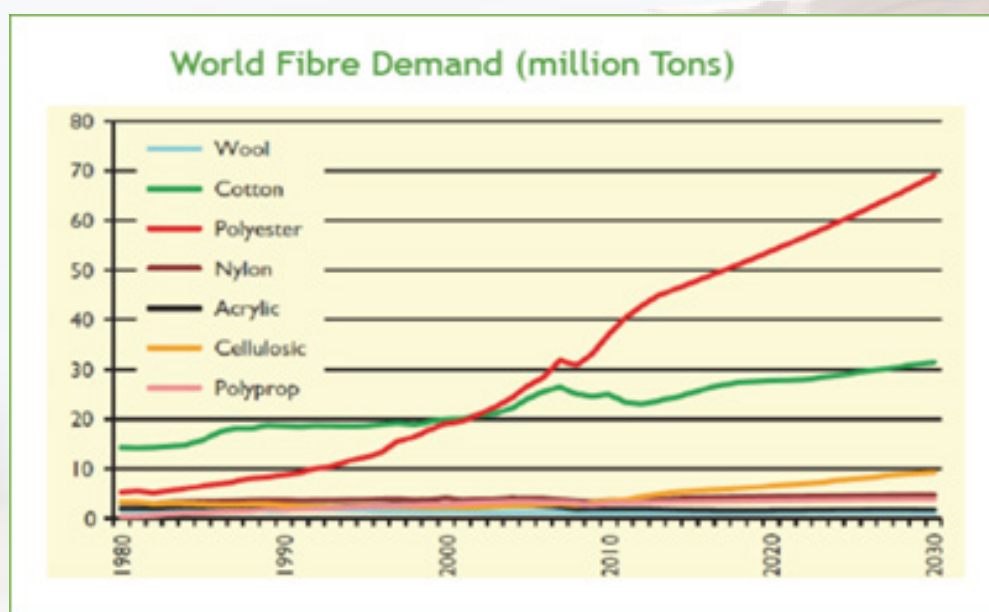


Figure 1: Global Fibre Demand ('Million MT), Source: ICAC (2016)

Cotton had traditionally dominated the global fibre trade since 1960s but the emergence of other forms of fibre has seen cotton consumption dwindling after the 1960s. Cotton consumption has been floating around 10 – 30 million tons against synthetic fibres which have exponentially risen from 15 million tons in 1960s to about 90 million tons in 2016 (Figure 1). Competition for land, weather challenges and rising standards of living has made cotton lag behind synthetic fibres.

China is the current top producer of synthetic fibres and accounts for more than 80 percent of total synthetic production followed by India. The man-made fibre sector in India despite being second after China has not experienced rapid growth due to government policies favouring the production of natural fibres. There is low capacity utilization of manmade fibres in India as demand is low, but consumption is rising and is expected to reach significant volumes in the next five years as younger generations are adapting to newer fashion styles.

VOLATILITY AND RELATIVE PRICES OF FIBRES

Price trends in the fibre sector are an important indicator of future trends in the textile and apparel industry as a whole. Several factors influence prices of fibres globally. Cotton and polyester prices are determined by various market forces. Cotton is traded as a commodity futures while polyester depends on US trade relations with other countries to a larger extent. Further, consumer lifestyles also indirectly affect the prices of both cotton and polyester.

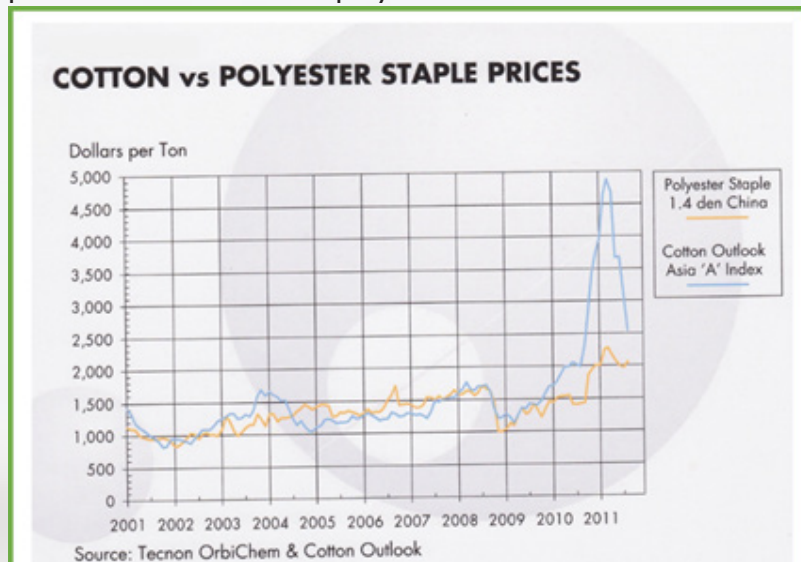


Figure 2: Cotton and Polyester Staple prices, 2001-2011

Cost and availability are some of the major important factors affecting competition of synthetic and natural fibres globally. As can be seen from Figure 2 above, polyester has overtaken cotton on the world fibre market. Cotton prices and demand performed very well from 2005 to mid-2007 due to high oil prices and abundant cotton stocks which drove prices of synthetic fibres high relative to cotton.

After global recession in 2008, demand and prices for synthetic fibres suffered significantly reaching less than US\$1000 per ton for polyester. High cotton prices reinforced a strong and quick recovery of synthetic fibre market particularly polyester, from mid-2009. However, an increase in cotton supply and lower cotton prices is likely to slow growth of polyester demand in the next few years. Additionally, rising global oil prices will discourage new investment in polyester production, again creating opportunities for cotton as a substitute.

Emergence of Pests and Dominance of Bt Cotton

Large scale cultivation of Bt cotton may lead to the development of resistance to Bt toxins. However, the concept of using non Bt cotton crop has been recommended to avoid or slow down the process of development of resistance. That aside, transgenic cottons have also had some negative effects from countries that have implemented the technology. Some pests such as meal bugs (*Phenacoccus solenopsis*) and mirid bugs (*Zanichius* sp) in Brazil, Pakistan, India, Uzbekistan are now building resistance to either the

toxins or the herbicides associated with the transgenes. Most notable, wide-spread use and misuse of glyphosate in cotton has led to the development of weeds having resistance to glyphosate in countries like India and Pakistan. The mealy bug alone was responsible for the loss of 34,000 MT of cotton in 2007 in Pakistan (Muhammad, 2007) and also reduced yields by up to 40-50 percent in infested fields in several parts of Gujarat, India with an estimated loss of value ranging from US\$400 000 to 500 000 in 2007

As of 2009/10, 52 percent of global area under cotton cultivation was allocated to

Bt cotton. Figure 3 shows a frequently chronicled illustration of ‘success’ of the performance Bt Cotton technology in India in terms of production and adoption rate since its introduction.

IMPLICATIONS OF GLOBAL EMERGING ISSUES ON AFRICAN AND MALAWI COTTON SECTOR

Bt cotton currently dominates global cotton trade and accounts of 82% percent of the global cotton area.

Bt cotton production has been up scaled up in the US, China, India, Australia and South Africa which coincidentally are major cotton producers. It is apparent that dominance of these countries has to some extent been contributed by the use of Bt. Cotton as evidenced by India becoming the number one global producer of cotton. This has however, killed comparative competition on the cotton world market especially for non Bt. Cotton producing countries such as Malawi.

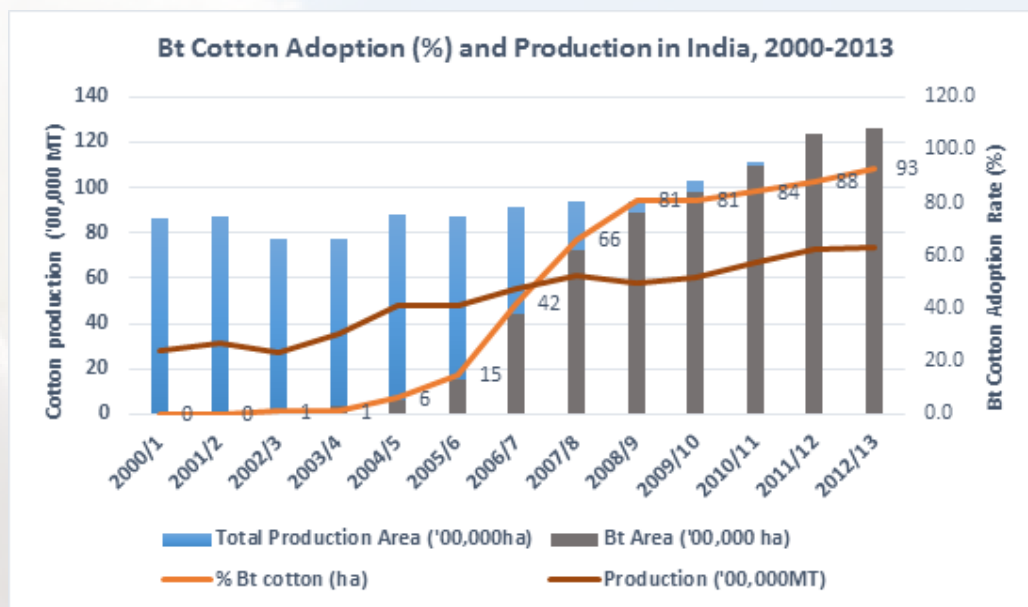


Figure 3: Bt Cotton Adoption and Production Trend in India, 2000-2013
Source: ASAAA (2015)

Adoption of Bt cotton technology commenced modestly and spiked in 2005/6 reaching 81% in two years before increasing further to 93% in 2012/13 season. While area under Bt cotton increased significantly as the proportion of total area under cotton, production increased at a slower pace as depicted in Figure 3. Production ranged from 3 million MT in 2003/4 to 6.29 million MT in 2012/3 with an average production of 4.97 million MT between 2003-2013. The success story heralded in India is not the same in Burkina Faso which unlike the former is currently locked up in further discussions with technology patented Monsanto over short fibre length issue which might threaten the future of the technology. USDA (2016) noted that the main cotton actors in Burkina Faso are considering phasing out the Bt technology by 2018 if a solution is not found. Countries like India are also considering long terms measures of utilizing hybrid cottons as a means of delivering transgenes. Hybrid cotton would thus provide an inherent restriction on the use of transgenes as well as provide a nominal degree of hybrid vigor in cotton.

The technology has improved yields and production in USA, China, Australia and India thus pushing nominal returns of African farmers ashore. Research has shown that Bt. Cotton despite its advantages lags behind in long staple fibre characteristic which is an important determinant of price. Quality of cotton is determined by the physical properties that relate to its spin ability into yarn and contribute to textile performance and quality. The most important of these properties are those associated with the length, strength and fineness (micronaire) of the fibre.

The emergence synthetic fibre and biotechnology is pushing the African cotton industry to the edge but all is not lost. New emerging markets especially in India and China can be explored. In spite of these two countries being the major producers of cotton, they are also huge importers of cotton lint from Africa. Malawian cotton is mostly handpicked making it favourable against contamination. This makes it a good contender and competitor on the market. Additionally, conventional cotton exhibits properties such long and strong fibres which are more efficient to span into yarn

contrary to Bt. cotton which does not unveil the same properties.

Trade in conventional cotton has grown significantly in recent years, as consumers increasingly seek out sustainable and chemical-free fibres. It is estimated that the global organic cotton market will increase by 20% and will result in an estimated US\$7.4 billion market by 2019. Smallholder farmers, especially from developing nations might find cultivating organic cotton profitable because of the increase in demand of the organic cotton lint on the market plus the better prices offered. The potentiality of African cotton should be fully utilised to boost economies and Malawi needs to address the following factors that affect its competitiveness:

Increase Production and productivity: Production has been declining at an average rate of 5 % over the past five years. The average yield has stagnated at between 800 and 900 kilograms per hectare against the potential 3,500 kilograms per hectare. Attributed to the diminishing levels of productivity are inadequate or limited access to improved farm inputs and poor agronomic practices. The niche market that Asian countries offer can only be exploited if Malawi produces adequate cotton stocks to equitably remunerate value chain actors and sustainably sustain the sector.

Contamination Reduction: Indian textile importers from Africa have observed that a bale of cotton from Sub-Sahara Africa contains on average 95 pieces of contaminants which are mostly dominated by plastics, hair, wood, and thrash from harvest and this has contributed to the low prices cotton fetches on the world market. On the international market, uncontaminated cotton is not only bought at a higher price but also attracts an additional premium. Unfortunately, quality management practices have not been fully integrated by actors along the value chain in Malawi. Good quality management starts from section of good quality seed through field husbandry practices, post-harvest handling, ginning and other activities thereof.

Grading and Standardisation of seed cotton: Grading as a value addition tool is a very important component in ensuring that cotton fetches good prices on the world market. Additionally it increases competitiveness with other cotton growing countries thus ensures that cotton is sold with a high value and with uniformity in terms of fibre specifications. Malawi needs to adopt cotton grading as a vital component within the value chain and all players should be responsible in ensuring that cotton is properly graded. There is need to formulate grading standards which essentially should involve different stakeholders who can harmoniously develop standards and sort each grades with recommended prices.

African Institute of Corporate Citizenship (AICC)
TAURUS House
City Centre, Along Convention Drive
P/Bag 382
Lilongwe 3
Malawi

Tel: 265 (0) 775 787/ 691
Fax 265 (0) 775 761
Email: aicc@aiccafrica.org
Website: www.aiccafrica.org

