

## Cotton Overview and Prospects of sub sector to Tanzania

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### *Key Message*

- *Clothing, animal feeds, soaps and edible oil are some of products derived from cotton and cotton by-products.*
- *Productivity in Tanzania is too low (about 250-800 kg/ha) compared to global best practice of 4,500kg/ha recorded from China.*
- *92% of Cotton produced globally comes from five countries (India, China, Turkey, Kyrgyzstan and USA).*
- *While China imports about 21% of cotton produced globally, USA and India accounts for 36% and 15% of global exports respectively;*
- *Little use of high yield seeds, poor applications of farm inputs, less use of irrigation due to unpredictable weather condition, inadequate financing and poor application of GAP are among challenges that are facing cotton subsector in Tanzania;*
- *The key recommendation is that, while Government should empower farmers on application of GAP, Financial institutions (TADB inclusive) should play a catalytic role and increase finance to subsector in order to unlock identified challenge along value chain.*

### **1. Introduction**

Cotton, a natural plant fiber is basically used for every type of clothing from jackets to normal shirts, in home it finds it use in bed sheets and curtains. Cotton by-products such as seeds are refined to edible oil and for making soap and cosmetics products, there are number of other products such as residue after oil refinery which is used for making animal feeds; cotton linters which are short fibres that remains on cotton seeds after ginning process are used for making cellulose acetate, viscose rayon, carboxymethyl cellulose, microcrystalline cellulose, cellulose nitrate and the preparation of specialty-grade paper.

### **2. Global Cotton Outlook**

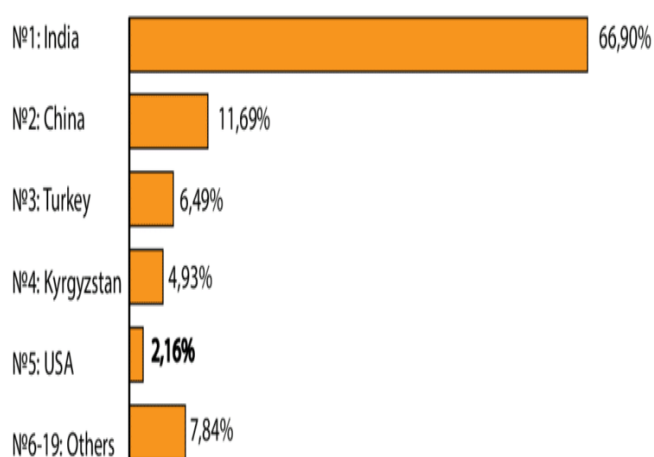
The large share of cotton that is produced globally comes from top 5 organic producing counties which together accounts for about 92.16% of the total cotton fibers. Other counties accounts for remaining 7.84% (Figure 1).

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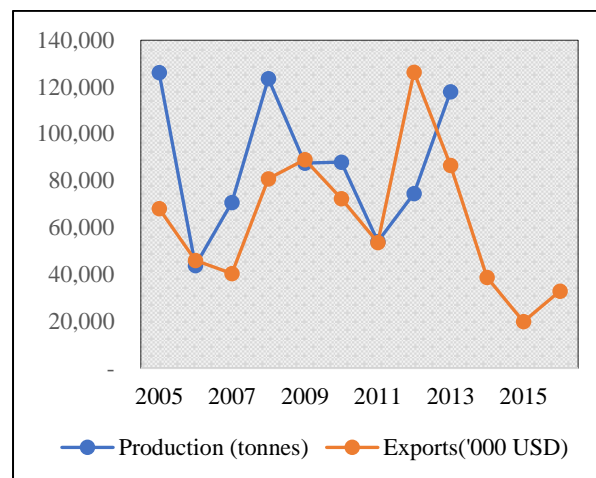
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**Fig.2:** Production and Exports trends (2005/16)

**Fig. 1:** Global share of five giant producers



**Source:** Textile Exchange



**Source:** FAOSTAT (2017)

The remaining 7.84% comes from Egypt (1.91%), Tanzania (1.91%), Burkina Faso (0.92%), Tajikistan (0.89%) and Uganda (0.71%). The remaining cotton producing countries contributes to less than 0.5% of global share.

Despite of being among the top global producers of cotton, China imports the large amount of raw cotton in the world accounting for 21% of the world cotton import value. Other importing countries that accounts for at least 5% of global share with their share in the brackets includes Vietnam (13%), Turkey (11%), Bangladesh (9%) Indonesia (7%) and Pakistan (5.6%). As opposed to imports, recent statistics indicates that USA is accounts for 36% of global exports value followed by India (15%), Brazil (11%) and (7.1%). In this series Tanzania contribute insignificant amount in the global share (Fig.3).

### 3. Cotton Subsector in Tanzania

Cotton is among the seven main export crops in Tanzania. These together accounted for 20.9 percent of total export earnings in 2017. Since independence, in most years, cotton has ranked second to coffee in terms of export value, and generates export earnings averaging USD 56 million per annum over the past 56 years. To date cotton provides direct income to more than 350,000 farm households and recent estimates show that about 40% of the total population in the country derives their livelihood directly or indirectly from the cotton industry. In the last decade, both production and forex contribution of the cotton has exhibited random walk pattern over time with sharp fall of forex earning realized in the last four years between 2012 -2015 (Figure 2). The decline of forex earning relative to production may have been caused by fluctuations of cotton prices on world market supply.

Domestically, cotton productivity is low to average at 250-800 kg/ha; compared with over 4,500 kg/ha in other cotton growing countries such as China. Tanzania cotton has good market prospects, especially with the current efforts to reinvigorate the Tanzanian textile industry; the key importing countries includes: Bangladesh, China, India, Malaysia, Indonesia, Pakistan, Taiwan, Philippines, South Korea, Others are Portugal, Italy, United Kingdom, Germany, Spain, Turkey, Kenya, Rwanda and Democratic Republic of Congo.

#### **4. Challenges and Opportunities for Cotton Industry in Tanzania**

Due to the strong efforts of current regimes to reinvigorate the country's textile industry and excellent competence in cotton research, there is expected increase in domestic demand for Tanzania's cotton in future. Assessment of cotton subsector that was done by Darlberg (2013) and ESRF (2018) indicates converging findings on subsector challenges and green light it offers. The cotton subsector in Tanzania is characterized by low productivity which is rooted by many reasons including low of use of high yield seeds which would multiply the current production. Other factors that hinders performance of the sector include regular change of weather pattern, less use of irrigation fed agriculture, less use of fertilizers and pests' control, poor applications of GAP and inadequate funding for cotton sector value chain. Producers' price which was recorded in 2017/18 season was too low (TZS 800-1200 per/kg) to enable producers get a reasonable profit from cotton production. In the same season, the average gross margin per hectare has been estimated at TZS 988,000 and TZS 268,500 for farmers who adopt Good Agricultural Practices (GAP) and those who do not respectively. These perpetuate poverty especially among cotton farmers who do not adopt GAP's.

#### **5. Conclusion and Recommendations**

Despite the various challenges facing the cotton industry, cotton remains as one of the major exports crops whose potential has not been exhausted adequately. However, there are opportunities to increase cotton production through improving crop husbandry practices, promotion of the adoption of productivity enhancing inputs, improving funding for cotton research and increasing domestic demand for the crop by invigorating the country's textile industry.

Future market prospects are good especially due to the expected increase in domestic demand for the crop. The recommendation arising from this policy brief are:

- Government through Ministry of Agriculture (MoA), Tanzania Cotton Board (TCB) and Tanzania Agriculture Research Institute (TARI), Cooperative Unions to improve seeds/agro chemicals availability by improving both cotton seeds production and distribution;

- Ministry of Agriculture and Local Government Authorities (LGAs) to help farmers to adopt GAP which are crucial for improving cotton yields and hence cotton producer's income. This can be made possible by strengthening the extension system by recruiting more extension workers, deploying them at the village level and providing logistical support;
  
- Financial institutions (TADB inclusive) to support and improve current cotton value chain subsector, financial support may be in primary production, research and development or through prospective investors in the Tanzanian textile industry through loans with favorable terms/conditions for them to unlock challenge along value chain. In the same vain Government should textile industry through tariff and non-tariff measures.