

**SUDAN**

**COUNTRY STATEMENT**

**TO**

**THE 77<sup>th</sup> PLENARY MEETING OF THE**

**ICAC**

**Abidjan, Côte d'Ivoire**  
**2-6 December, 2018**

THE SUDAN COTTON COMPANY  
PLANNING AND RESEARCH DEPARTMENT  
December, 2018

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## **INTRODUCTION :**

Cotton plays an important role in Sudan's development. Most of the cotton produced in Sudan is on relatively small farms as a cash crop intended to meet household's cash needs for both consumption and investment. The advent of genetically modified cotton has been successful. Adopting farmers have realized significant benefits through pesticide reductions, higher effective yields, and higher profits. Adoption was gradual since 2011, increased steadily and reached more than 90% of Sudan's total cotton area by 2018. Cotton farming is a livelihood issue and indeed a heritage and a way of life for more than 300.000 farmers. Hence, the intensive labor demand of cotton and cotton based industries had provided employment, reduced poverty, improved life and encouraged settlement in rural areas. Despite of this, the narrow based economic evaluations and shallow numbers are not able to manifest cotton as a social and community development crop. Furthermore, up to 1990's cotton had also been the mainstay economy with foreign exchange earnings of more than 40%.

Sudan grows *Gossypium Hirsutum* which represents 95% of the commercial area; Bt cotton accounts for more than 90% from this category and *Gossypium Barbadosense* represents 5% of the total cultivated area.

For the last 10 years cotton area, productivity and production varied greatly. The smallest area (41.2 thousand ha) was harvested 2009-2010 though the largest area (309 thousand ha) was harvested 2008-2009. Productivity ranged between 450 to 550 kg lint/ha during 2005-2011 using traditional varieties.

Cotton productivity increased from 450-550 to 950-1000 kg lint/ha with the introduction of GE cotton 2012-2015. *Gossypium Barbadosense* yield increased during the past two years to 750-900 kg/ha.

In the Sudan most of the production comes from irrigated cotton; rain-fed, flooded and basin irrigation systems contribute 10% of the total cotton production.

Cotton Insect complex in Sudan has changed; bollworm and jassid are no longer the main insect pests. Recently, Cotton Mealy bug has become the major devastating insect. Bacterial blight is major disease affecting production on both *Barbadosense* and *hirsutum* cottons.

Signs of climate change are reflected in rainfall amount distribution and time affecting sowing date and appearance of new insect pests.

## **Varieties and hybrids planted**

The most popular varieties grown are; Barakat 90 (*Gossypium barbadense*) represents extra-fine cotton category covers 4% of the total cultivated area. Abdin, Hamid and Burhan, (*Gossypium hirsutum*), representing long, medium and course cotton respectively. Cultivated in very small areas as a result of Bt cotton adoption. Seeni 1, Seeni 2 Bt cotton varieties and Hindi 1 and Hindi 2 Bt cotton Hybrids. Fiber quality of varieties and hybrids are shown in Table 4. New Bt cotton hybrids with new Bt genes are being tested in Sudan for commercial release.

Area, production and yield of cotton 2013-14 through 2018-19 are shown in Tables 1 and 2. The production area of the traditional varieties; long and extra-long categories has been increased to meet market requirements. The biological control based on early maturing, with tolerance to sucking insect pests and local diseases like black arm varieties together with early sowing date shall be adopted to save the crop from the bollworm damage.

### **Exports:**

Exports have started increased since 2014 , reaching about 22,000 tons , while expected to jump to this year 2018 to 150,000 . Details of exports by variety during the last six years are shown in table (3).

### **Local mills consumption:**

Domestic consumption of cotton in 2017 was about 1,000 tons , while estimated at 10 thousand tons in 2018 .

### **Cotton research**

The cotton research program is focusing on development of new varieties in both *gossypium hirsutum* and *barbadense* having good resistance to bacterial blight, tolerant to sucking insects with higher yield and better fiber quality. Cotton hybrid production is being one of the most crucial activities to enhance yield and quality (intra and inter specific). Advanced lines of medium staple and extra long cottons are being evaluated for release for general cultivation. Cultural practices and new production packages for GE cotton are the main concerns of the program. The program has put more emphasis on the IPM program to avoid insecticides application on traditional extra long cotton. Efforts are being made to establish a biological control system for a safer and a profitable production.

**Table (1)**  
**Sudan cotton area during the last five Seasons**

<b>Season</b>	<b>2014/2015</b>	<b>2015/2016</b>	<b>2016/2017</b>	<b>2017/2018</b>	<b>2018/2019</b>
Variety	In Hectar (000)				
Extra long Staple Barakat	0	0	4.6	11.5	22.9
Medium Staple Acala	57.7	51.3	46.8	149.1	160.8
<b>Total</b>	<b>57.7</b>	<b>51.3</b>	<b>51.4</b>	<b>160.6</b>	<b>183.7</b>

\* Estimate

**Table (2)**  
**Sudan cotton production during the last five seasons**

<b>season</b>	<b>204/2015</b>	<b>2015/2016</b>	<b>2016/207</b>	<b>2017/2018</b>	<b>2018/2019*</b>
Variety	In Metric Tons(000)				
Extra long Staple Barakat	0	0	4.00	10.00	20.00
Medium Staple Acala	36.8	51.4	31.00	90.00	100.00
<b>Total</b>	<b>36.8</b>	<b>51.4</b>	<b>35.00</b>	<b>100.00</b>	<b>120.00</b>

\* Estimate

**Table ( 3 ) Sudan Cotton Exports during the last six Years**

Year	2013	2014	2015	2016	2017*	2018*
	Metric Tons					
Extra Long Staple Barakat	1,000	19,786	0	0	0	2,000
Medium Staple Acala	19,000	<b>14,742</b>	39,365	80,001	136696	148,000
Others	0	0	0	0	2,358	
<b>Total</b>	<b>20,973</b>	<b>34,528</b>	<b>39,365</b>	<b>80,001</b>	<b>139,054</b>	<b>150,000</b>

\* Estimated

**Table (4)  
Fiber properties for commercial and some newly released varieties**

Variety	Length (mm)	Mic.	Strength g/tex.
<b>Non-GE cotton</b>			
<b>Barakat-90</b>	35	4.0	37
<b>Abdin</b>	31.4	4.6	30.1
<b>Hamid</b>	29.7	4.9	29.4
<b>GE cotton</b>			
<b>Hindi 1 (hybrid)</b>	28.3	4.4	30.2
<b>Hindi 2 (hybrid)</b>	29.1	4.6	29.8
<b>Seeni 1</b>	27.9	4.5	27.9
<b>Seeni 2</b>	27.1	4.9	27.8