

COTTON ANNUAL REPORT 2021

Overview

Cotton is usually grown in twenty-four (24) counties, mostly in the arid and semi – arid areas. A total of 21 counties registered cotton production during the period under review, with **10,641 Ha** under the crop. This area produced a total of **1,297 MT** of seed cotton, which was a much lower production than targeted **6,086 MT**.

The counties of Laikipia, Isiolo, Murang'a, West Pokot and Turkana did not grow any cotton during the period under review, because either seed was not available, or due to harsh weather conditions in those particular regions, which discouraged the farmers from growing the crop.

Though recorded as one of the lowest cotton production seasons, the Lake region counties of Homabay and Siaya performance were some of the best, as they experienced good rains which coincided with planting, which was timely undertaken. The region also received seed at the right time during the period under review. Uasin Gishu County though not a traditional cotton growing region, registered cotton growing in the midland transitional zone of Moiben Sub-county, where three-quarter of an acre was planted as a trial demonstration by three farmers (0.25 acres per farmer), registering very good performance, indicating the potential of cotton production in this particular area in the future.

COTTON PRODUCTION BY COUNTY 2021

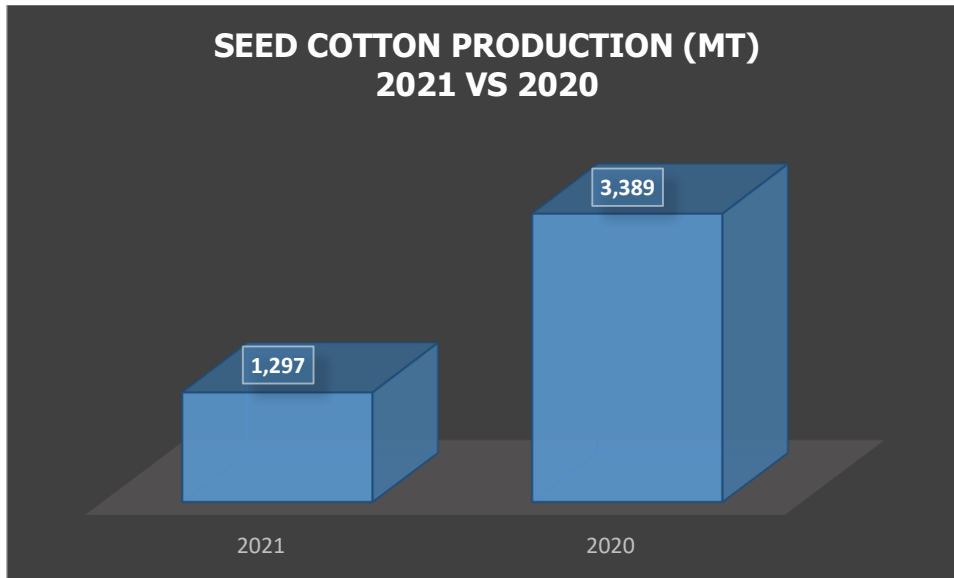
Table 1: Seed Cotton production 2021

#	COUNTY	Area (HA)	Seed Cotton Production (Mt)	Value Of Seed Cotton (Kes) @50/= per Kg	Lint-Bales (1 bale = 185kg)	Value Of Lint @190/= per Kg (KSHS)
1	Homa bay	840	224	11,597,233.25	437	14,196,565.67
2	Meru	2,688	211	10,541,820.00	411	13,352,972.00
3	Lamu	800	203	10,129,560.00	395	12,830,776.00
4	Siaya	1,400	191	9,152,371.00	372	12,114,210.00
5	Kitui	834	100	5,227,482.00	194	6,315,590.50
6	Baringo	148	69	3,429,000.00	134	4,354,166.67
7	Tana River	56	65	3,459,155.00	126	4,103,810.00
8	Busia	1,400	36	1,783,000.00	69	2,258,529.00
9	Kisumu	60	34	1,738,320.00	67	2,179,616.67
10	Makueni	458	31	1,361,120.00	60	1,944,776.67
11	Machakos	520	31	1,529,250.00	60	1,937,050.00
12	Tharaka Nithi	812	24	1,215,927.50	47	1,540,174.83
13	Elgeyo Marakwet	24	20	994,985.80	38	1,236,266.67
14	Taita Taveta	40	18	881,297.50	35	1,147,093.33
15	Kwale	24	13	650,000.00	25	823,333.33
16	Migori	20	10	500,000.00	20	634,000.00
17	Embu	396	7	366,080.00	14	445,866.67
18	Kirinyaga	28	7	355,420.00	13	432,883.33
19	Bungoma	72	3	125,000.00	5	158,333.33
20	Kilifi	20	2	93,050.00	4	117,863.33
21	Uasin Gishu	0.30	1	25,000.00	1	31,667.00
	TOTAL	10,641	1,297	65,155,072	2,527	82,155,545

Source: AFA Fibre Crops Directorate

In comparison to the previous period, area under the crop was higher during the period under review by 8% (from 9,837 ha to 10,641 ha), though this increase did not translate into the anticipated higher production due a combination of many factors during the period under review. Production was lower by almost by 62% during the period under review as illustrated in graph 1 below.

In the same manner the value of seed cotton fell by the same percentage from **Kshs 172,129,129.94** to **Kshs 65,155,072** during the period under review.



Graph 1: Comparison in seed cotton production 2020 vs 2021

Lamu County, which is usually the leading county in cotton production performed dismally due to failure in rains and late delivery of seed. These were the main culprits of this scenario, being replicated in other counties during the period under review. In this particular case, the seed arrived in June and immediately after germination, a dry spell set in, leading to a crop failure. The crop that survived was from planting made early in March, by a few farmers who had saved some seed from the previous season, managing to harvest a bottom crop, before the dry spell set in.

In the Lower Eastern region in Kitui County, production during the period under review was far much lower by almost three times in comparison to the previous season due to mainly the harsh dry spell.

Challenges

The following challenges highlighted below contributed to the dismal performance of the industry during the period under review

- **Unfavorable weather**
 - Extreme dry weather spell experienced during the production season leading to total crop failure in most of the cotton growing counties, with a few exceptions. The worst of this was in Lower Eastern region, Coast and Rift Valley regions. In some instances farmers replanted to salvage a crop for the season.

- In Upper Eastern region of Meru, T/Nithi, Embu and Kirinyaga counties, immediately after planting took place in October, the harsh weather affected the surviving crop, causing crop failure by more than 70%, lowering the projected area to only 2,943 acres as the actual area under which some meaningful harvest was done. The highest rainfall was recorded in Makueni with cumulative of 500mm for the entire crop season. Furthermore, much of the rain was recorded before mid-November, two-weeks before seeds were delivered to farmers.
- The low precipitation during March/ April season affected the expansion of the crop resulting in very low average yield/acre
- **Delayed seed delivery**
 - This was a major challenge during the period under review especially due to the fact that the BT seed has to be imported into the Country from India, undergo germination test by KEPHIS and then the procurement process before distribution. In most cases, the seed reached the farmers when the dry spell had set in.
 - The BT seed was not also adequate for all the farmers who had prepared their land in anticipation due to lack of adequate funding under the Big 4 Agenda. This forced most of these farmers to half-heartedly revert to the earlier abandoned conventional seed.
- **Illegal Cross Border trading**
 - There were reported illegal cross border trading especially in Busia/ Bungoma counties of cotton to Uganda, owing to high prices offered for the crop there. The production statistics therefore provided were far much lower than the actual production as farmers in these counties engaged in this illegal activity.
- **Poor Agronomic and husbandry practices in management of BT cotton**
 - Inadequate technical knowledge/capacity among county staff on BT technology and most of farmers led to poor management of crop in the field.

- Many farmers did not improve their agronomic practices as required for the management of the BT Cotton, which require fertilizers, pest control for other pests besides bollworm, in addition to other agronomic practices. In some instances, the farmers assumed the crop did not even require simple practices like weeding, leading to poor yields, with majority of them assuming that the variety was 100% immune to all pests.
- **Poor adaptability of BT cotton to local environment**
 - As a hybrid, the BT seed performed well under irrigation condition in the Bura/Hola Irrigation scheme. The seed could not however adapt well under rainfall conditions, which were much lower in addition to the fact that its maturity period was shorter than the conventional seed, hence it could not wait for the second rains and produce from top crop.
- **Pest infestation; the mealy bug menace**
 - In the past the mealy bugs were never a challenge to farmers, but over time this pest has developed resistance to the commonly preferred cotton pesticides.

Possible intervention to the challenges

- The need to strengthen group approach to cotton farming
- Upscaling extension service provision to cotton farmers,
- Provision of affordable credit (Cooperative based revolving Funds),
- Enhanced pesticide support program,
- Capacity building of County Extension staff on BT cotton
- Increased Forward and backward linkages among the value chain actors