



## introduction

When we talk about the changes of cotton productivity, it must be look at many factors that control it, the basis of which, of course, genetics, environment, and the interaction between them. The Changes in environmental condition are controlling in the productivity Recently in Egypt is the high temperatures that occur during the growth of the cotton plant from one of the environmental factors that affect on the productivity. So there are many searches in this field specifically to reduce the resulting effect of climate change and its impact on productivity.

In Egypt growing cotton faces two main problems are summarized in :

- 1- Farmers don't accept the cultivation of cotton this for many reasons, the farmer doesn't get at the end of harvest and sale of cotton the price he hoped to obtain because it costs a lot of money during the season represented in fertilization, Insecticides and different service operations & picking.

So, the Government is changes her policy with farmers in recent days by put a guarantee price to satisfy the farmers to Encouragement the farmers to achieve the increasing in the cultivated areas.

- 2- The nature of Machines inside the factories of spinning and weaving are not suitable for the quality of Egyptian cotton , where it works on short staple items.

So, to pass that problem it must be updating Machines to suit the characteristics of high- staple Egyptian cotton.

**Cotton research institute consists of 10 research sections under two main headings**

### 1- Cotton Production Research Sections :

- \* Cotton Breeding.
- \* Maintenance of genetic purity.
- \* Regional evaluation of cotton varieties.
- \* Agronomy .
- \* Physiology .

## 2- Cotton Technology and Quality Research Sections:

- \* Cotton spinning.
- \* Cotton fiber.
- \* Cotton chemistry.
- \* Cotton grading.
- \* Cotton ginning.

All of them working in the same direction to introduce new varieties with improved yield and better quality besides producing varieties tolerant to high temperature, drought and salinity. Conducting research on optimal planting date, plant density, fertilizer applications, and water requirements, planting & picking techniques and integrated pest management aiming to increase production, preserve quality and decrease production costs. To provide agriculture extension with the optimum required technical recommendations for each variety.

### Cultivated Area in Egypt

It is worth to Mention that Egypt Cultivated 6 commercial varieties, which is classified to Extra long and long stable as follows :

- Planted in Lower Egypt (Delta) : Giza 88,70,92
- Planted in Lower Egypt (Delta) : Giza 86
- Planted in Upper Egypt : Giza 90,Giza 80.

The Egyptian Producers prefer to cultivate the variety (Giza 86) due to its high quality & productivity and its high ginning outturn, beside the high demand on it either locally & internationally.

### Average Export Prices (Cent / lb) FOB Alexandria

Variety	Giza 88	Giza 86
<b>Average price</b>	<b>186.00</b>	<b>168.00</b>

### The Egyptian cotton proprieties 2013 crop

HVI measurement					
Cotton	Color	Micronair value	Fiber length UHM (mm.)	Fiber strength (gm / tex)	Brightness Rd%
Giza 88	Creamy	4.2	32.5	38.2	65.7
Giza 70	White	3.9	35.7	46.7	66.4
Giza 92	White	3.6	32.9	46.0	77.0
Giza 86	White	4.3	32.0	43.1	74.2
Giza 90	Creamy	4.3	28.5	34.2	65.0
Giza 80	Creamy	4.6	28.7	34.1	61.7

*Thanks for your attention*