



INTERNATIONAL TEXTILE MANUFACTURERS FEDERATION
FEDERATION INTERNATIONALE DES INDUSTRIES TEXTILES
INTERNATIONALE VEREINIGUNG DER TEXTILINDUSTRIE

Spinners Committee

GREECE 2019

From October 13-16, 2019 the ITMF Spinners Committee visited Greece on behalf of ITMF, as part of the on-going program of the Committee to visit cotton-producing countries around the world in an effort to strengthen the dialogue in the cotton pipeline between growers, ginners, seed breeders and cotton spinners.

The Committee would like to express its appreciation for the warm welcome and the interesting discussions and informative exchange of opinions with all the people the Committee visited and met on the different occasions in cotton fields, gins, mills, cotton organisations, and research institutions. The hospitality of all hosts was outstanding and made the whole visit not only very informative, but also very pleasant.

The Committee is very grateful to Mr. Damase Büchi, Senior Partner, Faircot, Geneva/Switzerland, and Mr. Yiannis Papadogiannis, Managing Director, Hecot, Athens/Greece, and Mr. Tasos Thomaidis, President, Hecot, Athens/Greece who had assisted the Committee with their in-depth expertise and experience of the Greek cotton industry in the detailed planning, preparation and execution of the visit, thus helping to make the visit an outstanding success.

Participants

Committee Members & Secretariat

Andrew Macdonald	Brazil	Santista Group (Chairman)
Enrique Crouse	South Africa	Prilla 2000
Thomas Nasiou	Switzerland	Uster Technologies
Walter Simeoni	South Africa	WS International
Christian Schindler	Switzerland	ITMF
Olivier Zieschank	Switzerland	ITMF

Guests

Damase Büchi	Switzerland	Faircot
Yiannis Papadogiannis	Greece	Hecot
Tasos Thomaidis	Greece	Hecot



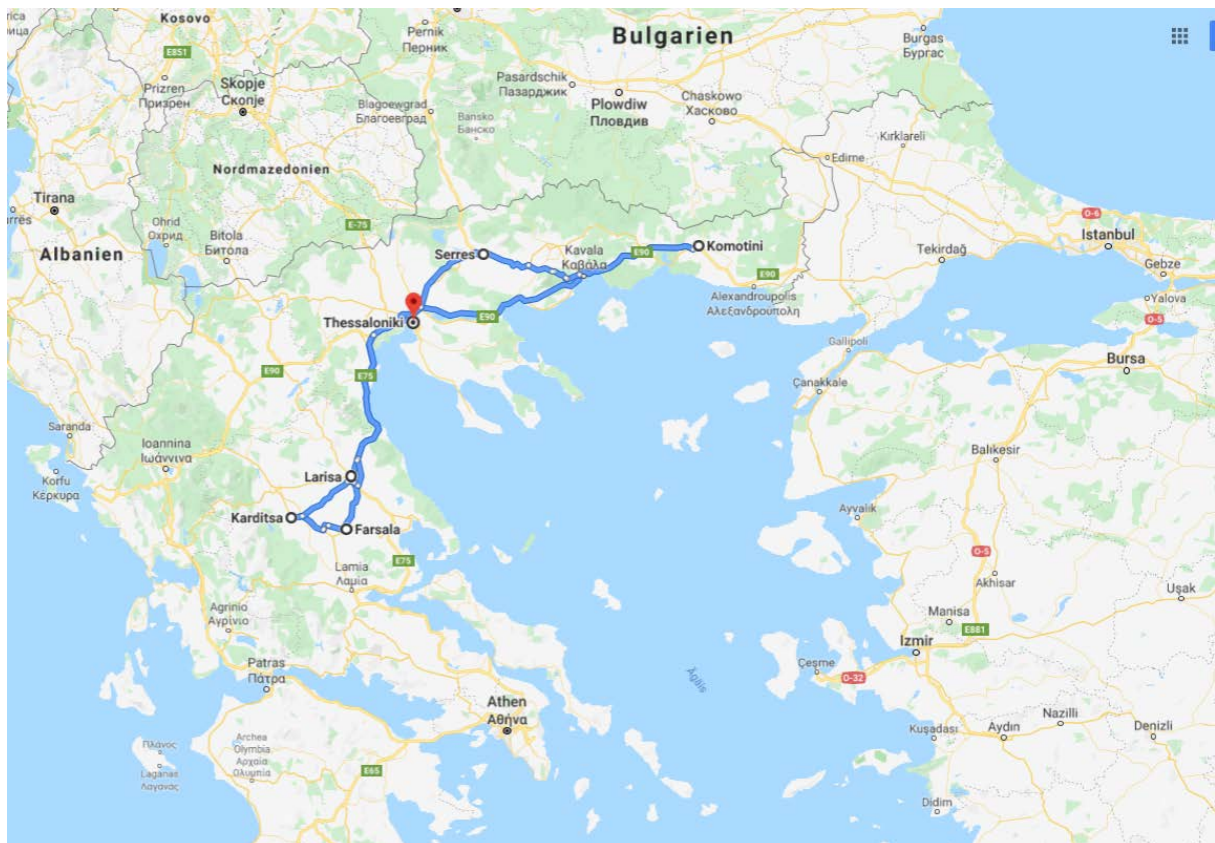
F.l.t.r.: Walter Simeoni, Andrew Macdonald, Damase Büchi, Enrique Crouse, Thomas Nasiou, Christian Schindler, Olivier Zieschank, Yiannis Papadogiannis

Objectives of the visit

- To review the situation of cotton growing and ginning in Greece
- To evaluate current cotton quality in the fields and harvesting
- To evaluate the ginning today, based on world standards
- To evaluate and discuss the road to sustainability and traceability in cotton
- To evaluate the cotton classing systems
- To discuss the future of cotton programs in Greece

Program

The Committee started the country visit by meeting in Thessaloniki, the regional capital of the region of Macedonia. From there, it travelled by bus to the East to the cotton growing area around the city of Komotini in the region of Thrace, the region bordering Turkey. There, it visited cotton fields and gins. From Komotini the Committee travelled again westwards to the city of Serres in the region of Macedonia to stay overnight. On the second day, the Committee headed to the cotton growing area around Larissa in the region of Thessaly. It visited cotton fields and a gin in Platykampos. After staying for the night in Larissa, the Committee visited a spinning mill and gin in Farsala as well as a cotton classification and standardisation office in Karditsa. On its way back to Thessaloniki, the Committee met with a representative of a cotton seed company.



EXECUTIVE SUMMARY

Overall Comments/Impressions

Greek cotton industry – background and facts

Looking back, Greece's peak cotton production was in the early 2000's with a production of around 450'000 tons of ginned cotton. In 2006, the EU decided to separate the subsidies from the production and instead applying them to area, known as "decoupled". This led to a decline in cotton production. Together with the decline in production the cotton quality also suffered, mainly due to this alteration of the incentives.

Greece is the 10th larger cotton producer and the 5th larger exporter of cotton in the world. During this season, Greece's cotton production is expected to reach around 330'000 – 350'000 tons of ginned cotton. Especially this year, the weather conditions helped not only to reach a high yield (between 3'500kg/hectare to 5'000kg/hectare or more of seed cotton) but also a very good quality.

A characteristic of the Greek cotton production is that the farmers own or rent land and cultivate mainly relatively small fields (indicative size is 3 to 10 hectares). This inhibits large-scale cultivation practices. The farmers deliver the seed cotton to the gins and are paid at that time, based on the equivalent international cotton prices for the quantity and moisture content. From then on the ginners are the owners of the ginned cotton, and sell it either directly to spinning mills, or through international traders. This constellation makes the adaptation of nation-wide programs easier as their implementation is centralized (through the ginners and their relations with the growers) and executed locally.

Greek cotton is mainly medium staple (28-29.5mm), with micronaire (3.9-4.5), strength averaging between, 30-31g/tex, and with good uniformity. Almost all the production is irrigated, but until now only a small percentage by drip irrigation, the cotton is machine-harvested, and saw ginned.

At harvest time the process of defoliation does not appear to be a standard practice due to various factors. This is because in general the Greek farmers are picking with their machines,



twice even three times, an uncommon practice compared to other machine harvesting countries. With the slow maturing plants, they attempt, through the spindle settings and harvesting speed, to pick the mature bolls and leave enough bolls to open for the second picking. It is estimated that the first pick leaves about 20% behind for the second. Therefore, in those cases where it is applied, the defoliation is light to allow the plants to complete the cycle for the second picking. In most countries the cost of a second pick is too expensive, clearly in

Greece this is not the case, Weather is also a consideration in this process of defoliation as they would be able to harvest only 12 days after the defoliation and with the unstable weather conditions this is an extra consideration, as to when, and if to decide to spray the application. However it was noted that if the farmers are producing seed cotton for sowing seed then they are obliged to defoliate to avoid as much trash as possible in the cotton seed.

Climate change has been a factor in many regions effecting the availability of water for irrigation. It has been observed that the salt content in the ground water increased in some areas close to the sea even when pumped from 200m depth. The average temperatures have also increased over time.

The ginning machinery in Greece is relatively new and of high production, but those visited working with reduced speeds and output to help preserve the good quality characteristics of the cotton. The production rate per gin stand varies between 5-10 bales per hour, and all bales weight around 220-230kg and are marked with a unique ID, indicating the production date, place and bale number, with a fibre outturn of between 33-36%.



Most of the cotton produced in Greece is for export and traded based on USDA-description. The main markets are Turkey and Egypt (together approx. 50%). Other markets are Bangladesh, China, Indonesia or Vietnam, with only about 2-3% of the production consumed by the local spinning mills.

In recent years, both the production as well as the yield and the quality of the cotton has improved. The main changes over the last 5 years are:

- Study and publication of the results of the various cotton seed varieties, in terms of yield and quality. Based on these, some of the ginners created premium schemes, called for example 'Cotton+' and "Best Fibre CFS" for certain varieties. This process has helped to streamline and reduce the varieties cultivated, and today only about 10 varieties produce around 80% of the volume.
- Homogeneity and uniformity of the cotton, because of the fewer varieties used, as well as improvement of the farming practices and the irrigation of the cotton fields, the quality of the Greek cotton has improved also in this respect

As far as the actual ginning of the cotton it was clear to the Committee from the gins visited that good cotton ginning practices are being followed, which goes a long way maintaining the excellent characteristics of the Greek cotton

In the last couple of years, the Hellenic Cotton Association has been very active in many areas. One major initiative is the creation of the European Cotton Alliance, together with the Spanish cotton and textile association. The alliance's aim is to give an identity to the cotton produced in the EU, to bring together all the cotton related industries and people from the EU and to promote the value of the product. The main dimensions of the cotton from EU are its sustainability (non-GMO, socially responsible produced cotton), quality, traceability and transparency.

Some ginners have implemented various incentive schemes to increase the value of the cotton also for the growers. An example of this has been the formation of CSF program (Certified Sustainable Fibermax), a program which in this case is set up in cooperation with BASF, and provides the farmers a full set of services including soil analysis, weather monitoring to optimize irrigation and the use of fertilizers as well as technical support from agronomic experts. The aim is to increase the yield in a sustainable way and to support the growers by offering higher prices for certain quality levels.

The other activity is the alignment of the official "production protocol" in Greece with those "items" used by BCI. It was understood that this will allow Greek cotton production to be included and certified under the BCI program. This is expected to take place soon, hopefully already in 2020 at a national level. BCI today being a recognised cotton sustainability program will benefit the ginners and through them, the farmers. The spinners facing requests from the retailers for BCI cotton products will also be benefited

Another initiative is to provide incentives to encourage the growers to bring the seed cotton with the correct moisture to the gin.

MEETINGS/VISITS

Sunday, 13 October 2019 (Thessaloniki)

The country visit started with a meeting over dinner, with Mr. Vaislis Markou, President, Hellenic Cotton Association, and Mr. Antonis Siarkos, President, European Cotton Alliance & Vice President, Hellenic Cotton Association. Both gentlemen are ginners and very active members of the cotton industry in Greece and in the EU. Also present was Mr Josep Baderi – Violar Greek Cotton Trading company active in the international market.

Monday, 14 October 2019 (Komotini)

From Thessaloniki the Committee travelled by van to Komotini in the East of the country, where the members visited the Thrakika Ginning mills and met with Mr. Kouroudis. Mr. Kouroudis and his family are in cotton ginning business for two generations and are fully and passionately involved in the daily business. Mr. Kouroudis is a visionary person always trying to innovate. He has created the “Cotton +” brand (which comprises 30% of his production) and is orchestrating and supporting the CSF program (Certified Sustainable Fibermax) from the farmers and ginners side.

The main attributes of the “Cotton +” brand are:

- Restricted cotton seed varieties with known good quality characteristics and with high yields,
- Classification of seed cotton, for lot separation to optimize the ginning,
- Certification, traceability and sustainable production practices
- A remuneration incentives scheme for the farmers

The implementation, control and certification of this program is undertaken by 3rd parties and external agriculture auditors, namely AIFORIKI and QMSCERT. The program involved 240 growers in the last season and produced 9’300 cotton bales.

Mr. Kouroudis is involved in other initiatives to create win-win conditions for the whole ecosystem of cotton in the area of Komotini. He is also working with retailers with the objective to increase the level of sustainability of the Greek cotton.

This year, he was asked for the first time by a brand/retailer to use tracers/markers in the cotton bales he is producing. Currently a part of the production is working on a trial basis, using the tracer Tailorlux to enable the traceability of the cotton through out the industrial chain.

The Committee visited an experimental cotton field adjacent to the gin which was ready for harvesting and all the varieties showed excellent quality, and potential for a good outturn.

The seed cotton currently in the patio showed no evident foreign matter and for machine cotton was remarkably clean.



During the visit the Committee had the opportunity to visit the cotton gin, four stands of Consulted Feed Master 96 with 164 saws, and using an impact lint cleaner, Clearly the gin is well managed, running at well below capacity with a soft roll in ensure the maximum preservation of the quality. The bales are HD pressed and covered in blue polyethylene

wrapper, which though better than woven polyester bagging still left the risk for contamination with the movement of the bales by fork lifters cutting the wrapping.

Tuesday, 15 October 2019 (Larissa)

The Committee travelled to Platykampos near Larissa where it visited the Karagiorgos ginning mills.

Mr. Karagiorgos is the second generation in cotton ginning business, operating in total 18 ginning mills in the Central and Northern parts of Greece and thereby is the largest cotton ginner in Greece, and leading trader of Greek cotton

Mr. Karagiorgos is also actively involved, as founder, in a special program called the "Best Fiber (BF)" program. Together with Egronomia, an agronomic firm in Larissa and Mr. Ioannis Karastergios, they are in the second year of the implementation of an ambitious program. The program is providing support and advice to the growers and is aiming at:

- Sustainability through pest, irrigation and fertilizer management.
- Welfare of the growers by providing trainings for safety and health to the growers as well as checking frequently the conditions and the implementation of the rules
- Tests to guarantee the existence of non-GMO's
- Labelling of the cotton through segregation and traceability from the yarn to the ginner/spinner with transparency
- Implementing Smart Farming Practices through continuous monitoring of conditions (weather, soil condition, statistical data)

The participating cotton growers can select between two options:

- In option 1, they need to fulfill the minimum quality criteria (36) and choose between 10 cotton seed varieties.
- In option 2, they need to choose between only 4 cotton seed varieties and comply with more criteria (70) to receive the certificate of EU Ecolabel, as well as the certification of producing according to the National production standard (which is harmonized with the EU agricultural production standard).

In both options, Ergonomia, as a 3rd party partner will visit and interact with the growers on a weekly basis during the growing and harvesting period.

Currently, there are 50 large scale growers participating in option 2 of the program.

The final target of the program is to create a cotton bale of good quality cotton, grown with sustainable practices, harvested and ginned with good and similar conditions and most importantly, with uniform characteristics.



During the visit to the gin, the cotton in the patio was found to be much more leafy than the visit the day before, and, though the gin (four stand LUMMUS with 170 saws each and again running at below capacity, with double lint cleaners with extensive precleaning) the ginned cotton was found to contain more than normal pin leaf, which the Committee felt was most likely the result of only partial defoliation.

This was confirmed when visiting cotton fields after leaving the gin. The committee saw fields to be harvested which had been defoliated but very lightly or with not such aggressive chemicals, since the dried leaf had not fallen of the plants as one would expect and there was some evidence of regrowth. This would be a challenge for the first picking, the fields awaiting the second picking had less evidence of dried leaf most having been removed during the first pick. The committee was assured that the second pick was ginned separately from the first.



Wednesday, 16 October 2019 (Farsala)

From Larissa, the Committee continued to travel to Farsala further south, where it visited Selected Textiles, a ginning and spinning mill and met with Mr. Apostolos Dontas, the CEO of the company.

Selected Textiles has 4 ginning mills and 4 spinning mills with a total capacity of 100'000 ring spindles. They gin the cotton mostly for their own requirements. Any cotton not spun at Selected Textiles is sold. If necessary, they also buy cotton.

The gin, a five stand Lummus was not running during the visit stopped for maintenance, but it was clear that cleaning the cotton was a number one priority. The vast array of pre-cleaning equipment, with built-in prototype Jossi contamination control system since 2003, which must be unique. After the gin, jet lint cleaners are installed (not impact) and a cleaning system normally associated with the blow room cleaning had been installed, which had been designed and adapted by Mr Dontas. An impressive configuration. Even so the spinning mills of the group are also equipped with Jossi contamination control

On the spinning side the customers of Selected Textiles yarns are mainly in Europe, and as are both weavers and knitters, they need to produce a wide range of counts, from Ne_c16 to Ne_c 60-70, carded and combed, conventional ring spun, as well as compact yarn. Currently, there are only 2 spinning mills in operation (50'000 spindles) and 2 OE machines which are mostly processing waste mixed with lower quality virgin cotton. The current production therefore is around 5 tons of yarn per day.

Mr Dontas informed the Committee that the spinning mills operate with a productivity of around 160 kg per employee per day (at an average Ne₃₀), which is the limit for the mill and close to the break-even, considering the technology available and installed (machinery installed from 2000). According to Mr. Dontas, the production should raise to 280 kg per employee and per day to make the production financially profitable and this would be possible with investments in the newer machinery and technologies.

In the afternoon the Committee had a meeting with Mr. Mohammed Darawsheh in Karditsa at the Hellenic Agricultural Organization (DIMITRA).

The organization is testing 1% of the Greek cotton production (the ginners are shipping the samples for testing) in order to obtain an overview of the quality and its trend in a nation level.

At the same time, the organization is testing 10% of the cotton bales produced for cotton seed production. This gives the ability to compare the various varieties and their quality performance in various periods and geographies. Currently, the laboratory has a track record for more than 40 varieties and their quality characteristics over time. This data helps and supports the growers and the ginners to select those varieties that are better suited quality-wise and at the same time provide financially sustainable production yields. In the recent years, Mr. Darawsheh noticed a reduction of the cultivated varieties and he expects this trend to continue in the coming seasons.

Another insight from the data analysis shows that the cotton bales produced from the seed production programs are better in colour grade. This has to do with the handling of the seed cotton and its ginning in all aspects.

Another trend noticed is the reduction of micronaire with the use of newer varieties (all non-GMO) which is positive for the spinning industry.



F.l.t.r.: W. Simeoni, E. Crouse, T. Nasiou, A. Macdonald and M. Darawsheh.

Later in the day, the Committee also met with Mr. Tsoutsas, an agronomist with BASF to discuss the question how new cotton seed varieties are developed for the Greece market.

The new cotton varieties are developed in Texas by BASF and are then cultivated in pilot plants in Greece for 5-7 years to check their performance and produce the seeds for planting from the ideal plants.

According to Mr. Tsoutsas, the newer varieties in the last years resulted in higher yields, lower micronaire and better staple and strength.

The Committee returned to Thessaloniki well satisfied that during short stay in Greece they had learnt much about the industry and was impressed with the dynamic and positive attitude of all those met during the visit. The Committee felt that Greece was/is an example to most cotton growing countries in terms of maximum use of technology in all senses of the word, to advance the production of cotton in Greece.

December 2019

More information about the Greek cotton industry can be found on the following website:

<https://thrakika.gr/en/greek-production>

Statistical information about the Greek cotton industry as of October 2019:

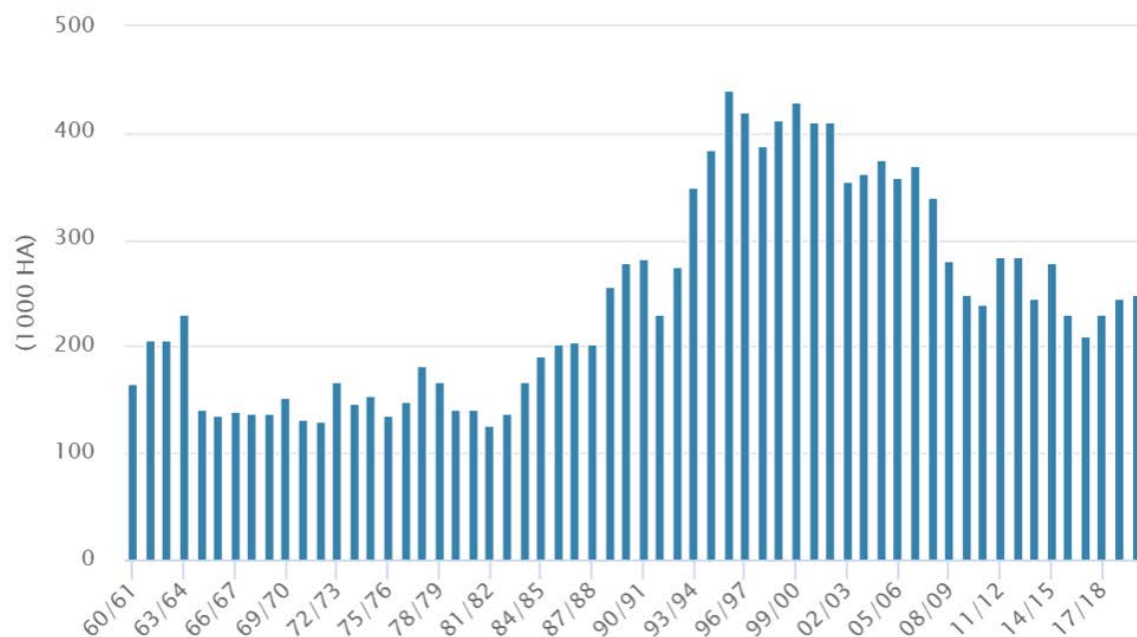
Cotton Production in Greece

Cotton Greece as of October 2019							
Attribute	19/20 Oct'19	Change	19/20 Sep'19	18/19	17/18	16/17	15/16
Area Harvested (1000 HA)	250	-	250	245	230	210	230
Beginning Stocks (1000 480 lb. Bales)	65	+1(+1.56%)	64	94	33	110	176
Production (1000 480 lb. Bales)	1,450	+50(+3.57%)	1,400	1,410	1,222	1,033	1,010
Imports (1000 480 lb. Bales)	30	-	30	31	30	27	28
Total Supply (1000 480 lb. Bales)	1,545	+51(+3.41%)	1,494	1,535	1,285	1,170	1,214
Exports (1000 480 lb. Bales)	1,350	+50(+3.85%)	1,300	1,355	1,076	1,017	959
Use (1000 480 lb. Bales)	90	-	90	90	90	70	95
Loss (1000 480 lb. Bales)	25	-	25	25	25	50	50
Total Dom. Cons. (1000 480 lb. Bales)	115	-	115	115	115	120	145
Ending Stocks (1000 480 lb. Bales)	80	+1(+1.27%)	79	65	94	33	110
Total Distribution (1000 480 lb. Bales)	1,545	+51(+3.41%)	1,494	1,535	1,285	1,170	1,214
Stock to Use % (PERCENT)	5.56	(-2.11%)	5.68	4.50	8.06	3.04	10.44
Yield (KG/HA)	1,263	+44(+3.61%)	1,219	1,253	1,157	1,071	956

Area Harvested (1000 Ha)

Cotton.Greece.Area Harvested for all Years.

Forecast Data reported on: 10/2019

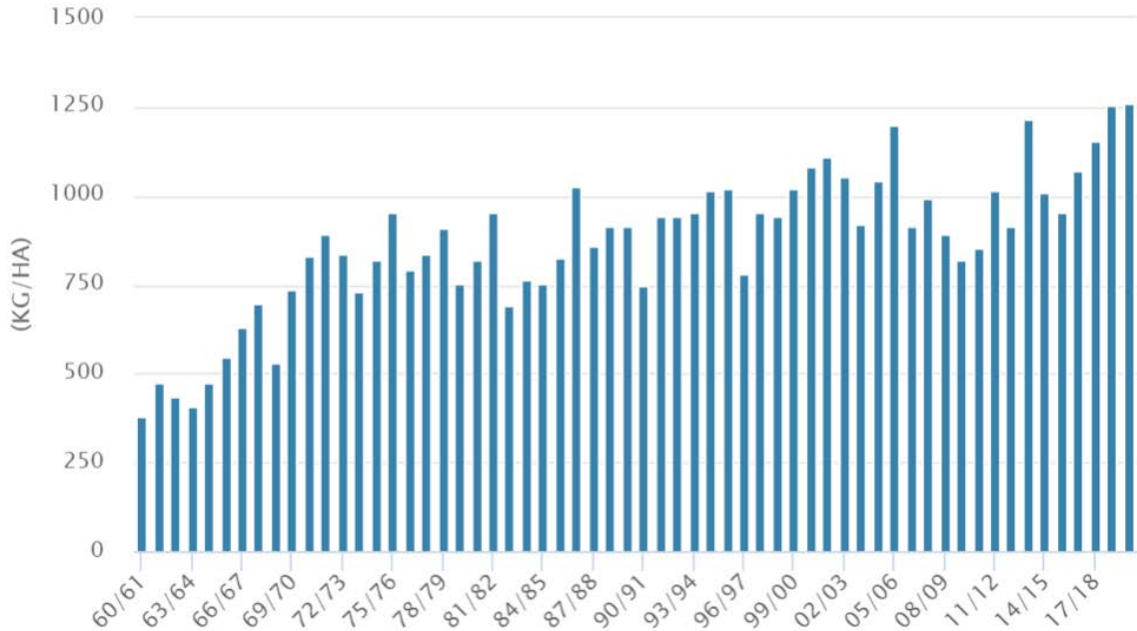


Source: FAS USDA

Yield (kg/Ha)

Cotton.Greece.Yield for all Years.

Forecast Data reported on: 10/2019

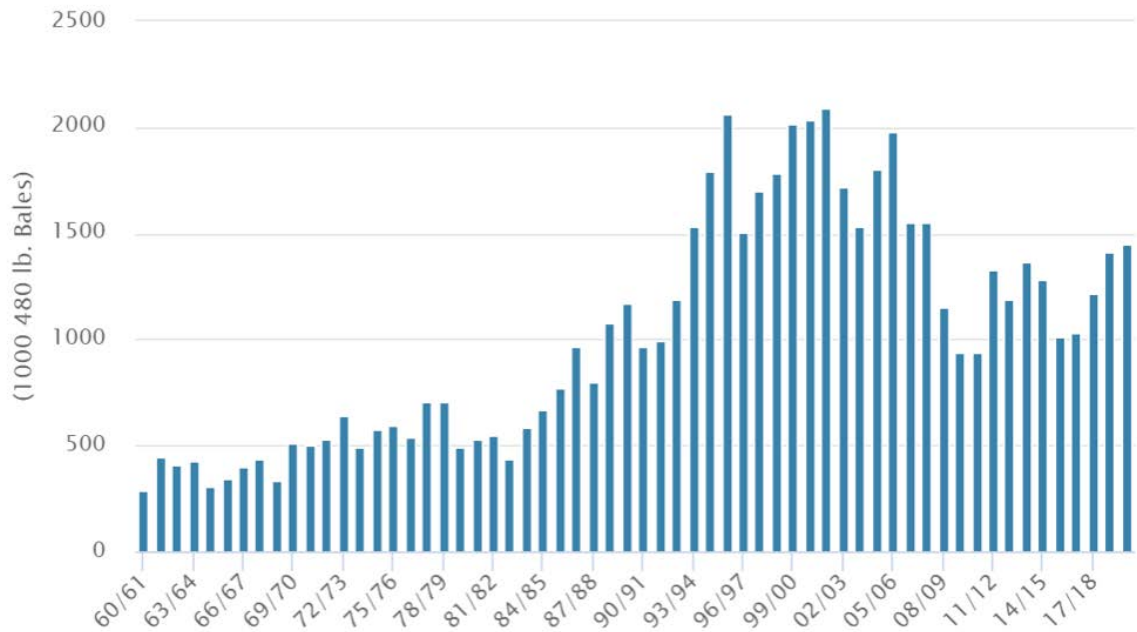


Source: FAS USDA

Production (1000 480 lb bales)

Cotton.Greece.Production for all Years.

Forecast Data reported on: 10/2019

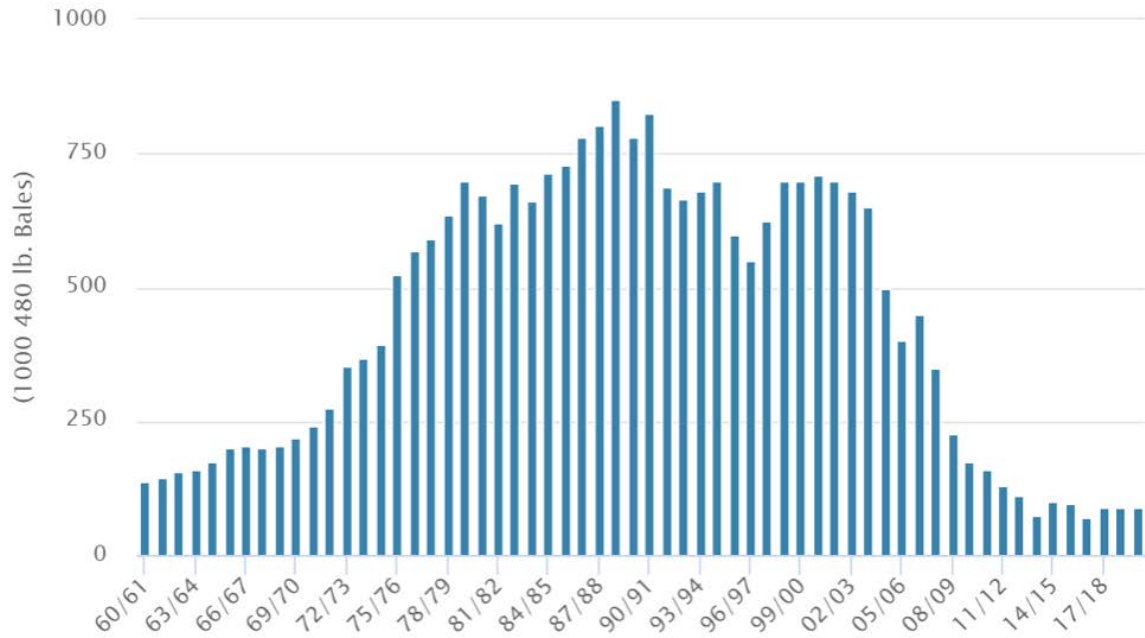


Source: FAS USDA

Consumption (1000 480 lb bales)

Cotton.Greece.Use for all Years.

Forecast Data reported on: 10/2019

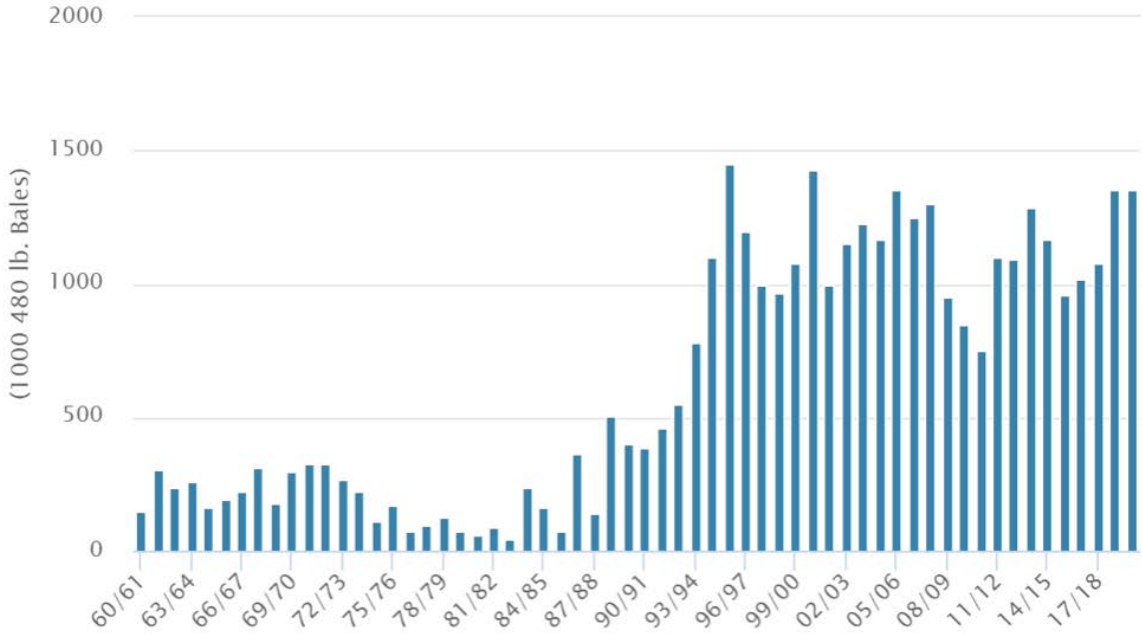


Source: FAS USDA

Exports (1000 480 lb bales)

Cotton.Greece.Exports for all Years.

Forecast Data reported on: 10/2019



Source: FAS USDA