

COTTON: PERSPECTIVES AND PROSPECTS OF A CHALLENGING EUROPEAN CROP

K. POLYMEROS(*) - K. MATTAS (**) - A. MIHAILIDIS (***)

Cotton is cultivated in over seventy countries covering a land amounted to 34 million hectares and is one of the most important cash crops in the world. Cotton is grown primarily for its fibers while cottonseed is a major source of producing vegetable oil and high quality protein for stock-feed. The fiber is used universally as a textile raw material.

Cotton plays a vital role in stimulating the economies of several producing countries. Large rural regions depend totally on the income coming from cotton cultivation or cotton processing activities. Several processing activities are performed in these regions and thus they strongly support the economic growth of the entire region.

EU is one of the major importers of cotton due to the fact of the high raw material demand of the EU based textile industry. Consequently, such a crop could be seen as an excellent alternative for the EU crop mix. No doubt climate conditions halt the expansion of cotton crop in EU and hence cotton is cultivated solely in southern regions of Europe, mainly Greece and secondly Spain. However, new policy schemes have been devised pressing for a significant decline of the cultivation of this crop. Thus, after the introduction of the Common Agricultural Policy reforms, farmers realized that as a consequence their cotton output will have to be reduced in the near future.

In this work an outlook of the world cotton supply and demand is portrayed and the cotton prospects in the European agriculture are investigated.

ABSTRACT

Cotton is considered as a very significant agricultural product in a sense that cotton production offers substantial income returns to farmers, to textile employees and to a large number of intermediaries suppliers and users. Cotton production, trade and process attracts the concerns of European policy since EU imports substantial quantities of cotton for its textile industry and two of its members, Greece and Spain are important cotton producers. Nevertheless, the status of the cotton sector is challenged as EU policies are adjusted towards an abolishment of the current protective regime. In this work an outlook of the world cotton trends is portrayed and the cotton's prospective in the integrated European agriculture are investigated taking into account anticipated CAP reforms.

RÉSUMÉ

Le coton est considéré un produit agricole significatif car sa production permet aux agriculteurs, ainsi qu'aux fournisseurs intermédiaires et aux utilisateurs, de réaliser des revenus importants. La production, la transformation et le commerce du coton attirent l'attention de la politique Européenne du fait que l'Union Européenne importe des quantités importantes de coton pour l'industrie textile et deux de ses membres, la Grèce et l'Espagne, sont de gros producteurs de coton. Néanmoins, le secteur du coton doit faire face aux défis des politiques de l'EU qui sont orientées vers l'abolition du régime de protection actuel. Dans ce travail, on insiste sur les tendances de la culture du coton dans le monde et sur ses perspectives dans l'agriculture Européenne intégrée, tenant compte des réformes de la PAC.

WORLD COTTON OUTLOOK

i. Production: Cotton crop falls into three main groups according to the properties and characteristics of its fibers. Group I includes the Egyptian or Pima cotton and Sea Island Extra Long Staple (*Gossypium barbadense*) cotton. The fiber is long with a staple length in excess of 32 mm and a micronaire index below 4.0. Group II consists of the African cotton and American Upland Medium Staple (*G. Hirsutum*) cotton. The staple length is between 25-30 mm and the micronaire ranges from 3.8 to 5.0.

The cotton cultivation in Greece and Spain belongs mainly in the Group II. Group I and Group II are

the most widely grown cottons hence they account for 8.0 percent and 90.0 percent of the world total production respectively. Group III are the Asiatic cotton or the Old World Short Staple (*G. arboreum* and *G. herbaceum*) cotton which is grown mainly in Asia and Africa and accounts the 2.0 percent of the world production.

The world cotton production, over the past fifty years, has increased from an average of 5,24 million tons between 1946 and 1950 to 19,12 million tons between 1991 and 1995. Initially, the increase originated mainly from an expansion of the cultivated area (26,27 million hectares in 1950 to 35,44 million in 1955) (**figure 1**). Afterwards, the increase in production came from yield enhancement, resulting from introducing improved varieties, new agronomic practices and sufficient crop protection.

Sixty five percent of the world production comes from China, USA, India, Pakistan and Uzbekistan. Other main producing countries are Argentina, Australia, Francophone Africa, Turkey, Greece, Egypt etc.

ii. Trade - Consumption: Cotton presents a very high

(*) Hellenic Cotton Board.

(**) Professor, Mediterranean Agronomic Institute and Aristotle University of Thessaloniki, Greece.

(***) Research associate, Aristotle University of Thessaloniki, Greece.

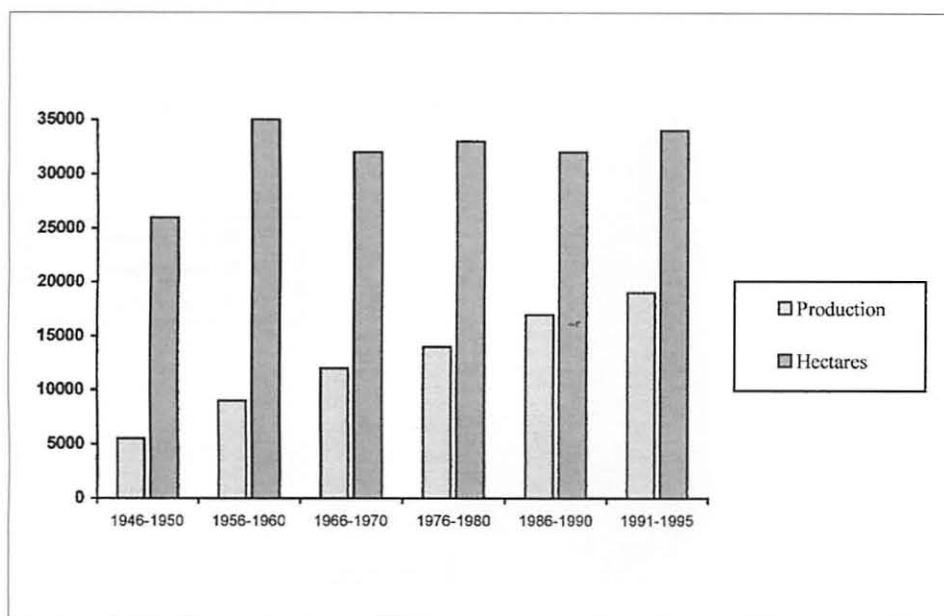


Figure 1 - World cotton production ('000 tons) and hectares ('000 ha). Five year average. Source: ICAC.

positioning in the world trade of agricultural products as almost one third of total production is exported each year (Sissoko, M and Duffy P., 1993). Although there is a large number of cotton producing countries only a few of them export cotton and this is because their domestic textile industries absorb all the local production. USA is considered as a dominant exporter, followed by Uzbekistan, Francophone Africa, Australia, Greece, Argentina and Pakistan. On the other hand, major importing markets are the European Union, Russia, Japan, Brazil, Korea and several East Europe and Asia countries.

World cotton consumption also exhibits an upward trend over the last fifty years. Consumption has increased from an average of 6 million tons in 1950 to reach 18,6 million tons in 1995. Nevertheless, cotton's share of world textile fiber consumption, was dropped, from 50% in 1986 to 46% between 1987 and 1994. Losses in market share occurred in both industrial and developing countries (Townsend T. 1995). Such decline can be attributed to high prices of cotton relative to other competitive textile fibers and to a gradual reduction in investing to cotton promotion activities in several countries (Volderamma Bacerra C. 1996). However, projections on consumption indicate a steady increase as a result of the population growth, the per capita income increase, and the customer's awareness of the advantages of cotton clothing.

iii. Policy: As far as the world cotton policy is concerned, it should be stressed that almost all cotton producing countries heavily protect cotton production and marketing activities. Protective policies, have economic, social and environmental grounds and any introduced policy changes should carefully be contemplated. Gov-

ernments introduce various policy measures in accordance with their particular objectives such as income protection, trade expansion, regional development and so on (Beel and Gilham, 1989). Thus, the magnitude of cotton production is directly or indirectly determined by the employed policies either by particular countries (China, USA) or by general trade organizations (Gatt, Nafta, EU etc). These policies in a broader sense can be arranged in four broad groups (Eisa et al 1994).

— Policies designed to boost farm income while interfering as little as possible with the level of market prices (USA, EU Brazil, Tanzania).

— Policies designed to control the cotton sector through extensive stare regulation (Uzbekistan, Chi-

na).

— Policies designed to manage domestic cotton prices so as to boost exports of textiles and apparel (India and Pakistan).

— Policies following a free market system (Mexico).

Nevertheless, world cotton policy is in transition after the last GATT Agreements and moreover under the future priorities of the World Trade Organization. Consequently, countries are moving towards liberalization of the cotton sector, reducing government intervention and protectionism. According to the World Bank, two issues stand out as crucial to the prospects of cotton to 2005. Firstly, as the transition to more open market economies progresses, the supportive mechanisms must be put in place to facilitate the flow of price signals from the textile industry and ultimate consumers back to the production sector. Secondly, the development of instruments that will provide the means for minimizing the risk that trade liberalization bears (World Bank, 1995).

EUROPEAN COTTON PERSPECTIVES

i. Production: As it was mentioned earlier only two EU countries, Greece and Spain, produce cotton. Greek production has experienced a rapid increase the last fifteen years, four hundred thousand tons in 1996 as compared to one hundred thousand tons in 1981. Spanish production as well, has followed an upward trend, since in 1981 was sixty thousand tons and in 1996 reached one hundred tons. In both countries the production enhancement originated mainly to the increase of the cultivated area.

ii. Trade - Consumption: While the European cotton

production is concentrated exclusively in these two Mediterranean countries, cotton is purchased in any European country. In particular, Germany, Italy, United Kingdom, Portugal, and France can be identified as the main importing countries. Cotton consumption in the EU exceeds the one million tons and is well over the EU production capacity (**figure 2**). Thus, EU is forced to import huge quantities of cotton from non-EU countries and is considered as one of the major world cotton markets.

iii. Policy: European policy for cotton was firstly implemented in 1981 when Greece joined EU as, at that time, no other member was producing cotton. Four years later Spain, after its accession to EU, adopted the same policy. The main aspect of this policy is that provides an income protective scheme to cotton producers through a Minimum Price mechanism which always leads to a producer-price well over the world price. This mechanism can be easily cast by the following equation:

$$\text{Minimum Price} = \text{World Price} + \text{EU Support}$$

It is however worth noting, that this Minimum Price does not cover the entire cotton production. EU has introduced several mechanisms to secure a stable cotton production and to prevent the expansion of cotton cultivation. Thus, EU guarantees a certain amount of production (Maximum Guaranteed Quantity) which, for instance, was set equal to 782 thousand tons for Greece and 249 thousand tons for Spain in 1995. Production beyond the above levels will activate a short of punishment mechanism the Co-responsibility Levy, so the over producing country is obliged to pay a fee. Moreover, the EU is setting a maximum level of funds that can be transferred to cotton producers (Maximum Community Payments, 770 million ECUs).

Although the EU adopted the most radical reform of the CAP in its history in June 1992, cotton has remained out of this new scheme. Nevertheless, CAP introduces totally new principles and in this respect, it is expected cotton protective mechanisms to be challenged. It is to early to foresee the future of this European crop but it is still important to be underlined that in a broader sense this crop fulfils certain principles of the new CAP. Cotton cultivation maintains the viability of large rural communities and no alternative substitute crop can be suggested. Thus, an elimination of the cotton production can lead to a devastation of entire rural regions (e.g Thessaly) regardless of the size of the income compensation farmers will receive. This is mainly due to the fact

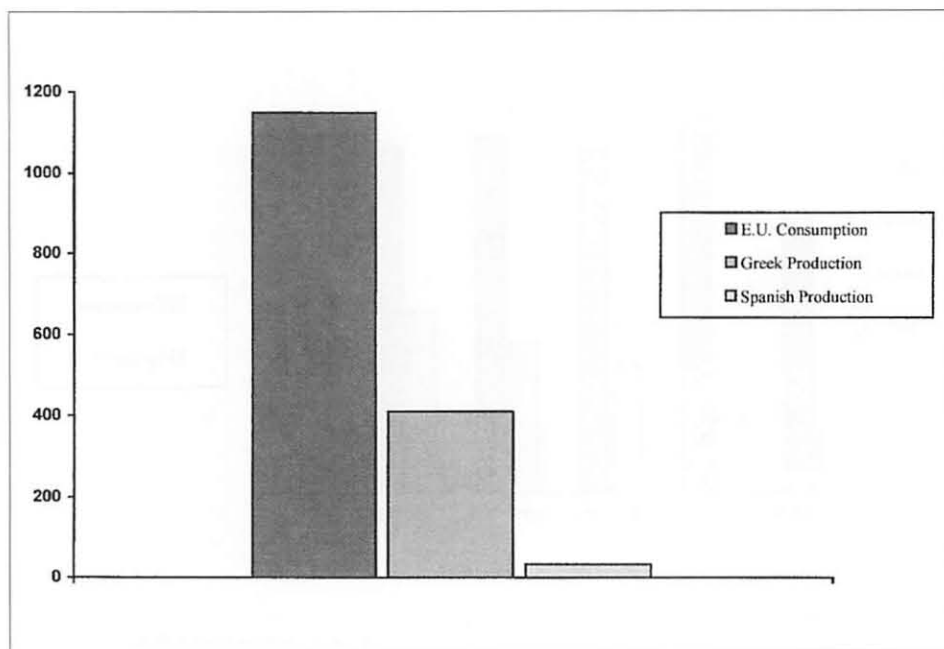


Figure 2 - European production and consumption - 1995 ('000 tons). Source: ICAC.

that small and medium enterprises have developed in regions where cotton is cultivated and these enterprises either provide inputs and services to cotton producers or purchase and process the product. Actually, only a few crops (maize, tomato, tobacco) can provide a somehow similar stimulus to the regional economy but these crops are already overproduced in EU.

On the other side EU cotton production can be transformed into a more competitive as the main objectives of the new CAP aim at. In this respect, first a high quality raw material can be ensured by introducing technological improvement during the production, harvest, storage and process phases. This can be mainly achieved by improving the quality of the product and by saving labor inputs. Low quality is attributed to the lack of standardization, the mixing of several varieties during the ginning process and the long storage under unfavorable conditions. Thus, investment in new infrastructure and technological improvements can substantially change the competitiveness of the product.

CONCLUSIONS AND POLICY IMPLICATIONS

Unambiguously, cotton can be seen as a very important crop since world wide demand is increasing and it is likely to continue to grow. Moreover, cotton provides a substantial income not only to farmers but also to several rural small and medium enterprises that either provide inputs and services to cotton farmers or purchase cotton for processing it.

EU satisfies its cotton demand mainly by importing it as it is produced only in two countries, Greece and Spain. The continuation of the present protective regime is

challenged after the adoption of the radical CAP reforms in 1992. Nevertheless, cotton production can be maintained in Greece and Spain without contradicting the objectives of the new CAP reform. Both the viability of certain rural EU regions will be preserved and the competitiveness of the product will be enhanced when well contemplated measures are devised. The implementation of modern cultivation methods, the shift of the production to total quality products, the renovation of the whole industry's infrastructure, the efficient technical support to cotton growers and especially the development of appropriate marketing strategies are some of the major indirect means EU should consider in its cotton policy.

Cotton production can be transformed into a market oriented product, fulfilling the demand of the European textile industry in a total competitive market environment. This message must go back to the production sector and farmers have to perceive this signal not as a dilemma but as a unique opportunity to keep and improve their positioning in the world trade, reinforcing the rural and regional development and enhancing the whole Agricultural Economy. ●

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