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**TRENDS, PROBLEMS AND PROSPECTS FOR TEXTILE  
PRODUCTION IN FUTURE**

**TEKSTİL ÜRETİMİNİN GELECEK TRENDLERİ,  
PROBLEMLERİ VE BEKLENTİLERİ**

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**ABSTRACT:** Demand for textile products is increasing and the adequate supply of textile fibres may become a major problem in coming years because of both changes in world climatic conditions affecting supply of natural fibre sources and because of financial and economic problems. Longer summers and warmer days will support fashion trends for light weight and casual wear. Thus, research on energy saving methods and processes, on fibre modification and structuring of yarns and fabrics will be beneficial.

**Keywords:** Textile fibres, supply, fibre sources, energy saving, climatic conditions, casual wear, fibre modification, structuring

**TEKSTİL ÜRETİMİNİN GELECEK TRENDLERİ,  
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**ÖZ:** Tekstil ürünlerine olan talep artmaktadır ve tekstil liflerinin yeterli ölçekte sağlanması gelecekte hem doğal kaynakları etkileyen dünya iklim koşullarındaki değişim, hem de finansal ve ekonomik problemler sebebiyle gelecekte en büyük sorun olacaktır. Uzayan yazlar ve daha sıcak günler hafif ve günlük giysilere yönelik moda eğilimlerini destekleyecektir. Dolayısıyla, enerji sakınımı sağlayan yöntem ve işlemler, lif modifikasyonu, iplik ve kumaşların yapılandırılması üzerindeki araştırmalar yararlı olacaktır.

**Anahtar sözcükler:** Tekstil lifleri, tedarik, lif kaynakları, enerji sakınımı, iklim koşulları, günlük giyim, lif modifikasyonu, yapılandırma

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Demand for textile products is increasing at an appreciable and steady rate since textiles satisfy one of the basic human needs for clothing and household uses along with technical needs in various industries such as automotive and in agriculture. The fibre material has sources in nature as from plants and animals, also as from petroleum and mineral reserves. Fibre growth and production depend on agricultural and mining activities all over the world and therefore are related with trends in worldwide political, economic, and climatic conditions.

The cellulosic fibres, both natural and regenerated, are demanded, and preferred in many areas of use like comfortable clothing and hygienic uses in spite of great developments in replacing them by improved man-made substitutes like micro-fibre polyester and acrylic fibres.

An equally important reason for the appeal of natural and in particular cellulosic fibres, is the growing danger of microplastic particles in sea waters stemming from laundering of synthetic clothing and household goods and, to a great extent, from plastic based packing materials. Thus, it is important to protect and sustain forests as the main source of wood cellulose and preserve also agricultural land for growing fibres like cotton and jute as well as those allowed for fibre producing animals. Thus, it is an important issue for textile industry to consider major climatic changes in fibre producing areas of the world and follow up related studies and international cooperation to secure a sustainable supply of fibre material.

It should be kept in mind that textile production is one of important factors to pollute waters discharged, finally, into seas. Wet processing, especially washing and coloring (as dyeing and printing) are greatly responsible for polluting rivers. There are research findings showing that reprocessing in finishing puts additional loads to environmental pollution.

Rising in world average temperature, more warm days, and longer summer seasons- especially in the northern hemisphere- coupled with economic crises bring out changes in clothing habits and preferences. Demand for cotton and its cellulosic substitutes like viscose rayon and acetate fibres may increase in future. This may boost new investments on regenerated fibre production. Rising petroleum prices will lead to textile industry to reduce energy cost by integrating solar energy units with textile plants and this may be very profitable in many countries and locations. The importance and need of petroleum products to produce synthetic fibres, especially for use in technical textiles with increasing areas of use, may perhaps strengthen this line of thought.

Longer summers and warmer days will further support fashion trends for light weight and casual or easy wear. This trend is supported by new modes of working as that of home office and in on-line working application. Younger generations show preference for this kind of working which allows them freedom and self-expression. Naturally this will also go in line with informal and comfortable wear habits.

Fashion trends also emphasize warm and light colors both in men's and women's clothing fashion which will reflect also to that of interior decoration and furniture. This is advantageous with energy and water saving process preferences in textile industry. Classical and long wearing clothing items like white shirt, coats, trousers, and skirts by which interesting combinations may be created for formal and casual wear seem to become in vogue. A market demand for secondhand clothing seems to develop, too, due to economic reasons. As for fabric design, elaborate dobby designs in woven fabrics and lofty and open structures both in woven and knitted fabrics inspired by historical fabric collections will be appealing.

In short, fibre demand continues, and securing fibre production and its worldwide distribution will be problems to solve for textile producing countries with considerations of ecological and financial difficulties related to climatic conditions. In this context recycling of fibres and fabrics will be important for ecological reasons and for reducing cost.

Technological improvements and research will be in the areas of energy saving processing, reducing the polluting process wastes and discharges, enhancing the comfort properties of fibres and yarns as well as of fabrics. In this context research on fibre modification, structuring of yarns and fabrics will be interesting subjects of study. There will also be trends in reducing disposable textile products used in hygienic and household uses and, instead, recycling them. Investments and research activities will continue in technical and medical textiles.

International cooperation and investment projects integrated with energy and raw material supply will be beneficial for textile producing countries and in large concerns to cope with major problems facing both production, marketing and financing textile production that will have to be sustained to satisfy an important and basic human need. International and national standards and regulations to reduce carbon footprint in textile goods will be of great importance in international textile trade.

More technical information needs to be incorporated in CAD software to help textile designers of fabrics and garments to secure comfort and ease to create attractive designs adapted to warmer climatic conditions.

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