EVALUATING ECONOMIC POTENTIAL FOR COTTON UTILIZATION IN NONWOVEN TEXTILE

Kishor Luitel
Darren Hudson
Dean Ethridge
Texas Tech University
Lubbock, Texas

Abstract

Cotton fiber is one of the most widely use fibers in the textile industry. Traditional textile manufacturing – spinning, weaving and knitting – has greatly decreased since the mid-1990s in the U.S. The use of synthetic fiber is increasing, replacing cotton fiber in textile industry. Various nonwoven technologies (which make fabrics and other substrates without spinning yarns that are woven or knitted into fabrics) constitute the fastest growing sector of textiles in both the U.S. and the world. Nonwoven textile products are largely found in products related to hygiene, medical/surgical products, wipes, filters, shoes, in coating/laminated substrates, electronics, automotive textiles, geotextiles, furnishing and bedding, construction, padding and others. This study evaluates the potential for cotton fiber in nonwoven textiles and analyzes the issues of cotton use in nonwovens, with a focus on potential target markets. The specific objectives are to 1) assess the characteristics of products, technologies, and firms that use and do not use cotton, and 2) identify the issues that motivate and deter the use of cotton among nonwoven textile producers. Data was collected through an online survey conducted among the nonwoven products producing firms. The study shows that cotton is not being used by most of the nonwoven producing firms. Primary substitute fibers are polypropylene and rayon, in products such as absorbent and hygienic textiles, medical/surgical and health care products, personal care products, and wipes. Reasons for using the substitute fibers include price levels, price volatility, processing costs, etc.