The cotton sector in Kenya consists of a large number of farmers in the Coastal, Eastern, North Eastern, Rift Valley and Western parts of the country. Despite this, cotton exports from Kenya are almost negligible and import of cotton from neighbouring countries supplements industrial domestic requirements. In the production, domestic spinning and weaving capacities have reduced from 52 mills in 1983 to about 6 mills currently (Wazir, August 2011). The garment sector on the other hand is driven by exports to the US under the African Growth and Opportunity Act (AGOA) with a total of approximately 170 large scale manufacturing units. An analysis of the East African region shows that Kenya, Sudan, Tanzania and Uganda account for significant quantities of cotton production. However, this industry suffers due to the use of outdated technologies particularly in ginning and textile manufacturing. The small scale holder producers also have limited knowledge on crop and farm management practices, input procurement and supply trends as well as price and market trends (Wazir, August 2011). These challenges result in a low cotton yield. Further to this, the quality of cotton also has high contamination. This poster seeks to show how transfer of technology through training and education can mitigate these challenges at all levels of the Cotton textile and Apparel (CTA) value chain. A total quality model (TQM) used across the CTA value chain in Sri Lanka in 2006 was adopted for this presentation and Quick Response (QR) program adoption by manufacturers and retailers in the apparel industry in USA around 1985. Further to this, technology transfer could also facilitate for value addition opportunities in cotton therefore creating extra jobs across the value chain.