

**Business Session IV**  
**Efficiencies in Spinning, New Developments in machinery and implications for cotton**

Chair: Mr. Ernst Grimmelt, President, Bremer Baumwollbörse

Panelists:

Dr. Christian Schindler, Secretary General, International Textile Manufacturers Association

Mr. T. Balamuralikrishna, Sr. General Manager (Marketing & Sales), IMW

Mr. Badsha Mia, CMD, Badsha Textiles

**Fiber Characteristics Affect Spinning Performance and Yarn Quality**

Mr. Schindler spoke about today's challenges for global textiles. Apparel sales will grow the strongest in Asia over the next three years, and by 2025 apparel sales in India and China will be equal to sales in the United States and the EU. Ring spindles installed capacities has shifted from Europe to Asia in the last decade, and world installed capacity today is approximately 250 million. The five largest textile machinery investors in 2014 were China, India, Vietnam, Turkey and Indonesia. World imports of cotton yarn average about 4 million tons per year, and China's share is nearly half. India and Pakistan are now larger exporters of cotton yarn than China.

Mr. Schindler observed that all segments of the world textile supply chain are becoming more efficient, beginning with rising cotton yields. The share of labor in the cost of producing a kilogram of cotton yarn fell by half between 1971 and 2014. Power consumption has fallen by one-third per kilogram of yarn. Open-end spinning is rising in the United States because of falling power costs and relatively high labor costs.

In the last 50 years, synthetic fibers have grown much faster than cotton because of high and volatile cotton prices and the sequestration of cotton supplies in the Chinese state reserve. China accounts for 43 million tons of 61 million tons of man-made fiber production.

The challenge for the textile industry is to overcome overcapacity and slower growth in end-use demand than was the case in previous decades. Forecasts suggest that world fiber use will double to 120 million tons by 2030, compared with 60 million tons in 2010. Almost all growth will be captured by polyester. He noted that because of expanded production capacity, prices of manmade fibers will remain "cheap" for several more years.

Mr. Balamuralikrishna spoke about the influences of raw material on yarn quality. Per capita fiber consumption in India is expected to grow from 5 kilograms to 7 kilograms, and Indian production of cotton yarn is expected to expand by 5% per year, while production of cotton fabric is growing by about 4% a year. The outlook for exports of yarn and fabric are negative over the next several years, but exports of apparel from India may remain stable. Indian exports may benefit from expanding demand for yarn and fabric in Vietnam, Bangladesh and China.

According to Mr. Balamuralikrishna, fiber length, Uniformity and strength are the most important quality features for ring spun yarn, while strength is the most important factor in Open-End yarns. Fiber length, short fiber content and length uniformity influence many yarn quality parameters, from yarn strength to hand. Mr. Balamuralikrishna listed the relationships between several fiber properties and the resulting impacts on yarn quality. Modern spinning machinery are configured to meet many different operational challenges and fiber quality parameters.

Mr. Mia spoke about the Opportunities and Challenges of Indian Cotton for the Bangladesh Textile Industry. Indian cotton now accounts for about half of the 1.2 million tons used in Bangladesh each season. India produces a wide range of cotton qualities, and proximity allows Indian cotton to arrive at mills in Bangladesh quickly. Further, a common history and similarity of culture and language favor close trade relations between India and Bangladesh.

Mr. Mia urged Indian cotton producers to address numerous challenges, including avoidance of contamination, minimization of gin trash, avoidance of mixing of cotton of different descriptions, and providing bale-by-bale HVI quality data. He urged Indian gins to take care to package cotton properly with appropriate materials to avoid bale bust, and to ensure proper moisture management to minimize quality deterioration. Mr. Mia observed that high-moisture bales result in reduced strength and the creation of cakes inside bales. He invited Indian cotton traders to attend the Bangladesh India Cotton Fest 2016, March 5 in Dhaka.

Mr. Schindler noted that production of BCI cotton was expanding because of retail interest. He felt that BCI is "here to stay."

Mr. Schindler reported that the ITMF meeting in Jaipur in November will feature a look at the impacts of global warming on the textile industry, and he urged those with an interest in the topic to attend.