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Technical Analysis

Price outlook for Gujarat-ICS-105, 29mm and ICE cotton futures for the period 09/11/15 to 23/11/15

EXPERT's Column

Shri Gnanasekar Thiagarajan

(The author is Director of Commtrendz Research and the views expressed in this column are his own and the author is not liable for any loss or damage, including without limitations, any profit or loss which may arise directly or indirectly from the use of above information.)

We will look into the Gujarat-ICS-105, 29mm prices along with other benchmarks and try to forecast price moves going forward.

As mentioned in the previous update, fundamental analysis involves studying and analysing various reports, data and based on that arriving at some possible direction for prices in the coming months or quarters.

Some of the recent fundamental drivers for the domestic cotton prices are:

- Cotton futures are lower in line with the underlying cash markets, as arrivals have begun and on concerns over demand and high carry forward stocks from last year. Moreover, reports of good production this kharif also weigh on cotton prices.

- Reports about the Cotton Corporation of India (CCI) planning to offload the stocks procured last year and looking to start purchasing new season cotton if the crop fits into the quality parameter, added further pressure on the prices of cotton.

- According the USDA latest release, India is expected to be the leading cotton producer in 2015-16 due to higher area. It has surpassed the US output in 2006-07 and is now expected to overtake China in 2015-16 as area declines in China.

- According to latest estimates by the Cotton Association of India (CAI), cotton output in 2015-16 is set to decline by 4 per cent at 370.50 lakh bales for 2015-16, as compared with 382.75 lakh bales last year.

Some of the fundamental drivers for International cotton prices are:

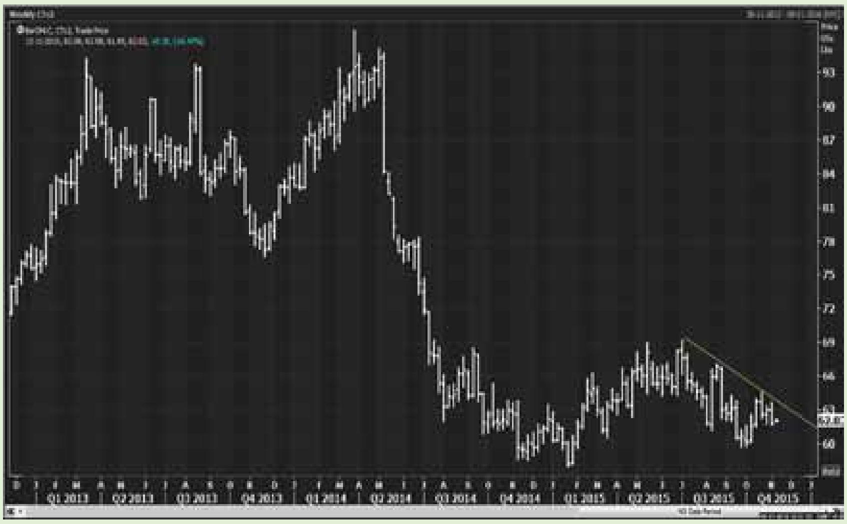
- Cotton Benchmark futures in New York ICE cotton futures fell to their lowest levels in 3-1/2 weeks on Friday, as a stronger dollar weighed on prices and the ongoing U.S. harvest led to seasonal pressure, prompting the fibre to suffer its sharpest weekly decline in nearly two months.

- Cotton futures on ICE dropped on Friday, pressured by a surging dollar on stronger-than-expected U.S. jobs figures

- A sharply stronger U.S. dollar also weighed on prices for the fibre. A stronger dollar pressures greenback-traded commodities like cotton by making them more expensive for overseas buyers.

- The market moved deeper into a normal carry structure as the harvest progressed and market participants awaited fundamental news from the U.S. government's supply and demand report expected this week.

Let us now dwell on some technical factors that influence price movements.



As mentioned earlier, the technical picture has turned lower and now looks vulnerable for a decline towards 8,800/qtl levels. Prices are moving perfectly in line with our expectations. Only an unexpected rise above 9,500/qtl could warn of the picture changing to neutral again. Such a rise will revive our hopes of a rally back towards 9,800-10,000/qtl levels. Any pullbacks higher towards 9,300-500/qtl, could now prove to be short-lived.

As mentioned earlier, indicators are displaying neutral to bearish tendencies, which could see prices edging further lower and finding resistances at higher levels. As mentioned in the previous update, indicators are slightly oversold indicating a possible upward correction initially, however, the upward correction could be short-lived. Prices could consolidate in the 9,200-300/qtl levels and then head lower in the coming months possible towards next support at 8700-800/qtl.

We will also look at the ICE Cotton futures charts for a possible direction in international prices.

As mentioned in the previous update, ideally, prices are expected to edge lower again, but chances also exist for the pullback to extend higher towards 64-65c before faltering again. Some support is presently seen near 61.75-62.00c now. A decline below 60.20c now could warn that the bullish picture has been negated and a strong decline could begin again. Such a fall could take prices lower towards 57c levels, being the next important support, followed by 55c. Presently, it is languishing in the 62-63c range and resistance is seen at 64-65c. Price structures warn of a decline to come in the coming weeks. Favoured view expects prices to move lower towards 58-60c levels or even lower.

CONCLUSION:

As mentioned earlier, weakness is seen in both the domestic and international prices. Both the domestic and international prices are under pressure and could further fall lower from present levels. For Guj ICS supports are seen at 8,700-8,800 /qtl and for ICE March cotton futures at 58-60c followed by 55c. Only an unexpected rise above 9,500 /qtl could change the picture to neutral in the domestic markets. The international markets are indicating a weaker trend now, and the overall trend is still weak and therefore, it needs to surpass key resistance levels around 67c levels for the trend to turn bullish again, till then it remains weak.

As China's Market Share Declines, Rest of Asia Increases Imports and Consumption

Last month, China announced that its 2016 cotton import quota would be limited to 894,000 tons, the same as in 2015, in order to encourage consumption of domestically produced cotton. Although cotton production in China has fallen for four consecutive seasons, with volume in 2015/16 estimated at 5.4 million tons, China is the world's second largest producer. In addition, the Chinese government still holds around 11 million tons in its reserves. The total supply of cotton in China for 2015/16, excluding imports, is estimated at 18 million tons, which would be more than double its annual volume of consumption, forecast at 7.7 million tons. However, demand for high quality cotton will be partially met by imports, particularly given concerns over the quality of this year's domestic crop. Chinese imports are projected to fall by 24%, to less than 1.4 million tons. China will likely remain the world's largest importer in 2015/16, but its share of world imports has fallen from 55% in 2011/12 to 22% in 2014/15 and may only reach 17% in 2015/16. Instead, imports to other Asian countries, where consumption has grown steadily in the last few seasons, are taking on a larger share and will partially offset the decline. World imports are forecast down 2% to 7.5 million tons. In 2011/12, imports by the rest of Asia accounted for 31% of world imports and this share has grown in each of the subsequent seasons in line with steady consumption growth. In 2015/16, Asian imports excluding China are expected to reach 4.5 million tons, representing 60% of world imports. Bangladesh, Vietnam and Indonesia are the three largest importers in the region outside of China. Imports by Bangladesh may slightly exceed one million tons in 2015/16, up 4% from last season, while imports by Vietnam are projected up 5% to 990,000 tons. After declining in 2013/14, imports by Indonesia increased 13% to 735,000 tons in 2014/15 and may reach 780,000 tons in 2015/16.

Mill use in Asia outside of China is forecast to rise by 4% to 12 million tons, representing 48% of world consumption projected at 25 million tons in 2015/16. Mill use in India is expected to reach 5.6 million tons, up 3% from 2014/15 and in Pakistan, 2.6 million tons, up 2% from 2014/15. While India and Pakistan are the world's second and third largest consumers of cotton, large volumes of production, estimated at 6.4 and 2.1 million tons, respectively, limit imports mostly to growths that are not available domestically.

The cotton trade remains competitive as China's cotton policy evolves and cotton-exporting countries continue to seek new markets. However, world production is forecast down 9% to 23.9 million tons, about 1.1 million tons below consumption, indicating that prices may not fall much, if at all, this season. Although production in the United States is projected down by 11% to 3.2 million tons and exports down by 9% to 2.2 million tons, it will likely remain the world's largest exporter. India, the world's second largest exporter, could see a small recovery in 2015/16, with exports forecast to increase 15% to 1.1 million tons. Low water storage levels for irrigation in Australia have limited production, which is expected to increase by 4% to 470,000 tons assuming sufficient rainfall. As a result, exports are projected to reach around 470,000 tons, down significantly from 2011/12-2012/13 when export volume was over one million tons a year. After a significant recovery in 2014/15, exports from Brazil, the world's third largest exporter are forecast down by 10% to 770,000 tons. Exports from Francophone Africa are anticipated to reach 1.1 million tons in 2015/16. Production in Francophone Africa has steadily grown from 494,000 tons in 2010/11 to 1.1 million tons in 2014/15 and 2015/16. As production has grown in this region, its share of world exports, which used be 6% in 2010/11, is expected to rise to around 14% in 2015/16.

After reaching 12.7 million tons in 2014/15, ending stocks in China may decrease for first time since 2010/11, falling by 8% in 2015/16 to 11.7 million tons. Stocks outside of China are forecast to fall by 2% to 9 million tons. World ending stocks could decline by 5% to 20.7 million tons, which is equivalent to 83% of world mill use in 2015/16.

Source: ICAC Cotton This Month, November 02, 2015

SUPPLY AND DISTRIBUTION OF COTTON

November 02, 2015

Seasons begin on August 1 — Million Metric Tons

	2010/11	2011/12	2012/13	2013/14 Est.	2014/15 Est.	2015/16 Proj.
BEGINNING STOCKS						
WORLD TOTAL	**9.362**	**10.225**	**15.262**	**17.973**	**20.29**	**21.86**
China (Mainland)	2.688	2.087	6.181	9.607	12.09	12.66
USA	0.642	0.566	0.729	0.903	0.65	0.98
PRODUCTION						
WORLD TOTAL	**25.453**	**27.845**	**26.704**	**26.278**	**26.16**	**23.92**
India	5.865	6.239	6.205	6.770	6.51	6.37
China (Mainland)	6.400	7.400	7.300	6.929	6.48	5.41
USA	3.942	3.391	3.770	2.811	3.55	3.17
Pakistan	1.948	2.311	2.002	2.076	2.31	2.05
Brazil	1.960	1.877	1.310	1.734	1.53	1.54
Uzbekistan	0.910	0.880	1.000	0.940	0.89	0.89
Others	4.429	5.746	5.117	5.019	4.90	4.49
CONSUMPTION						
WORLD TOTAL	**24.607**	**22.781**	**23.608**	**23.634**	**24.47**	**25.05**
China (Mainland)	9.580	8.635	8.290	7.517	7.70	7.74
India	4.470	4.231	4.817	4.939	5.43	5.60
Pakistan	2.170	2.121	2.216	2.476	2.53	2.58
East Asia	1.833	1.780	2.139	2.312	2.49	2.65
Europe & Turkey	1.550	1.498	1.565	1.615	1.58	1.65
Brazil	0.958	0.897	0.910	0.862	0.80	0.80
USA	0.849	0.718	0.762	0.773	0.78	0.81
CIS	0.577	0.545	0.581	0.614	0.60	0.61
Others	2.620	2.357	2.329	2.525	2.56	2.62
EXPORTS						
WORLD TOTAL	**7.690**	**9.828**	**9.986**	**8.997**	**7.71**	**7.47**
USA	3.130	2.526	2.836	2.293	2.45	2.23
India	1.085	2.159	1.685	2.014	0.91	1.06
Australia	0.545	1.010	1.305	1.037	0.52	0.47
Brazil	0.435	1.043	0.938	0.485	0.85	0.77
CFA Zone	0.476	0.597	0.829	0.978	0.87	1.05
Uzbekistan	0.600	0.550	0.653	0.650	0.59	0.57
IMPORTS						
WORLD TOTAL	**7.749**	**9.784**	**9.600**	**8.670**	**7.60**	**7.47**
China	2.609	5.342	4.426	3.075	1.80	1.38
East Asia	1.826	1.997	2.355	2.355	2.63	2.75
Europe & Turkey	0.973	0.725	0.833	1.082	1.01	0.89
Bangladesh	0.843	0.680	0.631	0.967	0.97	1.00
Pakistan	0.314	0.190	0.411	0.247	0.20	0.41
TRADE IMBALANCE 1/	**0.058**	**-0.044**	**-0.385**	**-0.328**	**-0.12**	**0.00**
STOCKS ADJUSTMENT 2/	**-0.041**	**0.018**	**0.001**	**0.000**	**0.00**	**0.00**
ENDING STOCKS						
WORLD TOTAL	**10.225**	**15.262**	**17.973**	**20.290**	**21.86**	**20.73**
China (Mainland)	2.087	6.181	9.607	12.088	12.66	11.70
USA	0.566	0.729	0.903	0.651	0.98	1.12
ENDING STOCKS/MILL USE (%)						
WORLD-LESS-CHINA (M) 3/	**54**	**64**	**55**	**51**	**55**	**52**
CHINA (MAINLAND) 4/	**22**	**72**	**116**	**161**	**164**	**151**
COTLOOK A INDEX 5/	**164**	**100**	**88**	**91**	**71**	

1/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.

2/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.

3/ World-less-China's ending stocks divided by World-less-China's mill use, multiplied by 100.

4/ China's ending stocks divided by China's mill use, multiplied by 100.

5/ U.S. Cents per pound

(Source : ICAC Monthly November 2015)

Nonwoven Uses of Cotton – An Update

(Continued from Issue No.31)

High Loft and Flame-Retardancy in Nonwovens

In their 2011 paper, Nam et al. focused more on the decomposition of flame-retardant cotton. They used needle-punched nonwoven cotton fabric (made from greige cotton) and treated with DAP and urea. They observed that the greige hindered phosphorous and nitrogen absorption, as the samples was treated with both chemicals by dipping. The main observation was that DAP and urea affected the activation energy (Ea) throughout the thermal decomposition of greige cotton nonwoven fabric. The Ea of the fabric was significantly increased with the DAP treatment alone.

The addition of urea induced a higher Ea, but further addition of urea resulted in lower Ea than with DAP alone. Such results indicate that flame-retardant greige cotton fabric decomposes with greater difficulty than the untreated one. Urea additive increases the thermal stability and enhances the efficiency of diammonium phosphate in decomposing cellulose chains in the crystalline region. Refer to their paper regarding calculation of Ea.

The durability of the fire retardant characteristic after repeated washings continues to be an issue. The primary concern is that the treatment applied for retaining the retardancy feature after washing has to be economically feasible to use in all its stages, including application. The process used to produce nonwoven cotton webs using a binder fiber, subjecting them to a through-air bonding process, and treating them with commercially available fire-retardant chemicals and binders showed that it is important to select the correct combination of flame retardants and binders, since both have an effect on the durability of the webs after washing. Research is under way to develop a model that takes these mutual effects into account in order to help select the best combination for optimum fire-retardant performance. A paper along these lines was presented at the 2010 Beltwide Cotton Conferences.

Addition of a fire-retardant property and efforts to make the feature persist after multiple launderings, in those cases where washing is needed, must also deal with the negative impacts on the nonwoven material itself. Imparting fire-retardant properties also impacts a number of desirable mechanical properties, such as resistance, harsh handling and lower air permeability, independently of whether the fiber is made from cellulosic or synthetic fibers. It is known that web density also impacts fire retardancy. In most cases, fire retardancy is achieved through chemical treatment and high loft cotton nonwovens lose the high loft and soft feel desired for soft finishing as they go through chemical finishing treatments.

Enhancing the Value of Nonwovens

A 2011 paper on 'Plasma treatment of cotton nonwovens' dealt with the addition of other desirable features to nonwovens made from cotton. The researchers assessed the degree to which plasma treatment performs in a fashion somewhat similar to the effects of scouring and bleaching on cotton fabrics. Researchers used atmospheric pressure plasma treatment, which is considered to be better than vacuum plasma treatment because it spreads evenly over the entire surface of the material being treated.

The working hypothesis was that the treatment would increase the wettability, printability and adhesive properties by increasing the surface energies of the materials. The findings showed that there was almost a 50% reduction in wax content in the plasma-treated fabric compared to the pre-treated fabric. The research samples were also tested to assess any changes in strength after the plasma treatment: no significant decrease in tensile strength values was found. Abrasion testing results showed a non-significant increase in abrasion resistance after the plasma treatment. But this improvement in abrasion resistance confirmed the effectiveness of plasma treatment in increasing the adhesive properties of the treated material. The lower wax content in treated fabric improved the wettability of the material, thereby enhancing its capacity for dye uptake.

A field study was conducted to determine the biodegradation rates of nonwoven rayon, cotton, polylactic acid, and polypropylene fabrics in a silt loam soil under warm and moist conditions. Researchers (paper presented at the 2011 Conferences) placed fabric samples in the soil at a depth of 10 cm and dug them up after 7, 14, 21, and 28 days of burial to determine the amount of fabric remaining by comparing them with a non-buried fabric. The biodegradation of rayon and cotton was described using first-order kinetics and the rate constants were determined to be 0.094 and 0.056/d, respectively. No biodegradation of polylactic acid and polypropylene was observed during the entire 28 days. The half-life values, i.e., the time required for 50% loss of the material,

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was 7.4 and 12.4 days for the nonwoven rayon and cotton, respectively. Data for tearing and shear strength parameters after the fabrics were recovered from the soil were determined and may be available from researchers.

Use of Greige Cotton in Nonwovens

Currently, very little greige (raw) cotton or even bleached cotton lint is used to manufacture nonwoven products. According to the paper presented at the 2011 Conferences, manufactured fibers are preferred by the nonwoven industry because of their cleanliness (no trash), pure white color and consistency of supply. Greige cotton always contains some non-lint foreign trash that must be removed during processing, especially for certain higher quality end-use products and applications. However, most nonwoven goods manufacturers do not have the needed cotton opening, cleaning and carding capabilities to properly process run-of the mill, greige raw cotton. Researchers at the Southern Regional Research Center used pre-cleaned cotton and proved that it could be used to make quality products without bleaching. The mechanically pre-cleaned cotton was processed to make needle-punched and hydroentangled nonwoven base materials of 100% non-bleached cotton content for certain end-use applications, such as household quilts and crafts, throw blankets, furnishings and wipes. Based on preliminary test data on wax content before and after certain levels of specific hydroentanglement energy, it appeared that most of the greige cotton's natural waxes might be removed during the hydroentanglement process. Pre-cleaned cotton without trash has a potential for greater use in nonwovens. It has already been established that greige cotton has a higher absorption capacity than bleached cotton.

Normally, all fabrics, woven, nonwoven, or knitted, made from greige cotton must undergo the chemical process of scouring to enable them to absorb dyes and other finishing substances. Researchers studied the effects of bleaching and dyeing hydroentangled greige cotton fabrics with and without traditional scouring and/or bleaching treatments. The hydroentangling method was used to produce nonwoven fabrics using low and high levels of bonding water pressure. The fabrics were bleached and dyed with and without the traditional scouring treatment. The results were presented at the Beltwide Conferences in 2012 wherein scoured only, bleached only (i.e., w/o conventional scouring), and scoured and bleached pre-cleaned greige cottons were compared. According to the authors, their findings show that fabrics made from greige cotton can be bleached and even dyed satisfactorily without the traditional scouring process, which is costly and cumbersome.

Greige Cotton in Medical Uses

The use of cotton-based nonwovens is limited. According to some sources, they comprise 1% of total nonwovens, although others calculate this share at 3%. It may safely be said that only 2-3% of the raw material used in nonwovens today is cotton and that whatever cotton is used has been mechanically and/or chemically processed. Other natural fibers used in nonwovens amount to about 1%. Therefore, synthetic fibers make up about 96% of nonwovens. Elimination of scouring and/or bleaching could lower the cost of raw cotton as a material for nonwovens. Recently, as a result of improved methods of cleaning cotton to eliminate non-lint matter, increasing attention is being given to the use of greige cotton for use in absorbent products. The nonwoven processes that open and expose the hydrophilic cellulosic component of greige cotton fiber to water absorption have also favored the use of greige cotton. Greige cotton has excellent pro-coagulant properties and promotes clotting of blood at a two-fold greater rate than bleached cotton (Edward et al., 2014). Edward et al. (2014) prepared nonwovens using hydroentangling from greige cotton, which had been mechanically cleaned and tested for wound-healing properties and used as a cover stock layer in diapers. Greige cotton as a hemostat and carrier acts synergistically to enhance silicon dioxide mediated clotting. According to the same paper, hydroentangled cotton samples performed similarly or slightly better in generating hydrogen peroxide levels previously found to be involved in stimulating healing. Generation of low-level hydrogen peroxide by hydroentangled nonwoven greige cotton is consistent with the retention of accessible levels of pectin correlated to enhanced granulation tissue or improved cell proliferation and fibroblast and macrophage production.

The results suggest that highly cleaned (but not scoured and bleached) greige cotton nonwovens possess properties that may improve maintenance of dryness by incontinence products and promote skin care in absorbent products. Results have shown that mechanically cleaned greige cotton can now be considered as a low-cost bio-based fiber alternative to synthetic fibers for top sheet use and design products. The results of the work of Edward et al. (2014) show that mechanically cleaned cotton constitutes a bio-based, ecofriendly alternative to synthetic fibers when designed into the layers of incontinence products. The results further show that cotton can perform the function of a top sheet in diapers and other similar products. Mechanically cleaned greige cotton retains the cotton fiber cuticle lipids (hence it is more hydrophobic than scoured and bleached cotton) and primary cell wall pectin, which are removed in scoured and bleached cotton. Although bleached and scoured cotton provides highly absorbent properties for many applications, it does not typically have good rewet and strikethrough properties. Greige cotton also proved to have superior rewet and strikethrough properties. Results also showed that use of greige cotton has the following benefits:

• Lower processing cost due to the elimination of the scouring and bleaching steps.

• Elimination of processing is also beneficial in terms of cotton footprints.

• Cuticle and primary cell wall are not damaged. Pectin and natural waxes that help to heal wounds are retained.

• Rewetting capability of nonwovens from greige cotton is higher that of processed and synthetic fibers.

• Transmits synthetic urine more rapidly than currently used products.

• Greige cotton performs better in nonwovens.

New Technologies

The USDA-ARS Southern Regional Research Center in New Orleans, USA, has done extensive work on cottonbased nonwovens. Dr. Sawhney has devoted many years of research on traditional textiles and nonwovens. In their 2009 paper "Nonwovens Manufacturing Technologies and Cotton's Realistic Scope in Nonwovens," Dr. Sawhney and his colleagues reviewed the subject thoroughly. Since then, Dr. Sawhney and his colleagues have published numerous peer-reviewed papers and articles on the cotton-based nonwovens in reputable journals, including the Textile Research Journal. Some of the selected publications since 2009 are listed below:

• Advent of Greige Cotton Non-Wovens Made using a Hydro-Entanglement Process. Textile Research Journal, 80 (15). pp. 1540-1549. (2010)

• Effect of Water Pressure on Absorbency of Hydroentangled Greige Cotton Non-woven Fabrics. Textile Research Journal, 82 (1). pp. 21-26. (2011)

• A Comparative Study of Nonwoven Fabrics Made with Two Distinctly Different Forms of Greige Cotton Lint. Textile Research Journal, 81 (14). pp. 1484-1492. (2011)

• Effect of Web Formation on Properties of Hydroentangled Nonwoven Fabrics. World Journal of Engineering, 9 (5). pp. 407-416. (2012)

• Whiteness and Absorbency of Hydroentangled Cotton-Based Nonwoven Fabrics of Different Constituent Fibers and Fiber Blends. World Journal of Engineering, 10 (2). pp. 125-132. (2013)

• Effects of Greige Cotton Lint Properties on Hydroentangled Nonwoven Fabrics. Textile Research Journal, 83 (1). pp. 3-12. (2013)

• Bleaching of greige cotton-based nonwovens without scouring. Textile Research Journal (TRJ) April 2014.

• Progressive and cumulative fabric effects of multiple hydro-entangling impacts at different water pressure on a greige cotton substrate. Textile Research Journal, May 2015.

• Rethinking Cotton in Nonwovens. Advanced Textiles Source, Industrial Fabrics Association International (IFAI). April 2015.

The Southern Regional Research Center in New Orleans, Louisiana, houses a state-of-the-art nonwovens research laboratory that deals with all the processes involved in the development and optimization of processes for the successful use of cotton in nonwovens. The lab also focuses on development of cotton-nonwoven blends and composites for specific applications using new chemistry and other relevant sciences and technologies. In addition, the lab studies the cost and environmental impacts of any successful research and development project.

More research needs to be done to enhance the use of cotton in a variety of products produced from nonwovens. One such minor field is the use of cotton-based products capable of controlling hemorrhaging, when and where necessary. Edwards et al. (2009) observed that both aminized cotton and bentonite show promise as hemostatic agents and in lethal arterial hemorrhage control, respectively. Although the sealant properties of bentonite are well documented and the potential to use aminized cotton based on its ability to promote aggregation of negatively charged platelets has been verified, little is known about the effects of both of these materials on blood clotting. The study showed that the relative effects of both of these materials have similarities and differences. The nearly similar lag phase which accounts for clotting time is interesting. On the other hand, thrombin formation and potential appear to be more pronounced with aminized cotton. The studies showed the potential of these agents for use in hemorrhage control.

The flame-retardancy and fireproofing of nonwoven products made from cotton has improved substantially, but both features still need to be further improved. Interactions among the treatments and chemicals need to be enhanced and multiple washings should have a minimum impact on the flame-retardancy feature of nonwovens.

One of the issues that limit the use of cotton, and particularly greige cotton, which has proved to be better in the work presented here, is the availability of nonwoven end products in only one color (white). The market trend is to design patterned fabrics, thus creating product differentiation and brand recognition by the consumer. So, pattern choices need to be added in nonwovens made from cotton or other natural fibers.

Source : The ICAC Recorder, Vol. XXXIII No.2, June 2015

Production of Fibres

(In Mn. Kg)

As on	Raw Cotton (Oct.-Sept.)	Synthetic			Cellulosic	Sub Total
		PSF	ASF	PPSF	VSF	
2005-06	4097	628.15	107.81	3.08	228.98	968.02
2006-07	4760	791.99	97.13	3.52	246.83	1139.47
2007-08	5219	879.61	81.23	3.43	279.90	1244.17
2008-09	4930	750.12	79.50	3.44	232.75	1065.81
2009-10	5185	872.13	90.45	3.38	302.09	1268.05
2010-11	5763	896.33	79.48	3.74	305.10	1284.65
2011-12	5899	829.74	77.71	4.08	322.64	1234.17
2012-13	--	848.05	73.59	4.26	337.49	1263.39
2013-14	--	845.95	96.12	3.71	361.02	1306.80
2014-15 (P)	--	881.56	92.54	4.62	365.17	1343.89
2015-16 (Apr-Jun) (P)	--	361.15	45.74	1.57	126.87	535.33
2013-14 (P)						
April	--	65.66	8.26	0.27	26.39	100.58
May	--	70.67	8.54	0.31	30.80	110.32
Jun	--	71.56	8.08	0.30	30.51	110.45
Jul	--	72.26	7.78	0.34	30.97	111.35
August	--	74.67	8.26	0.32	31.44	114.69
September	--	72.29	8.58	0.22	29.58	110.67
October	--	72.67	8.63	0.28	30.98	112.56
November	--	68.28	8.28	0.31	29.96	106.83
December	--	70.68	8.62	0.31	30.88	110.49
January	--	70.40	6.76	0.32	30.86	108.34
February	--	64.87	7.01	0.33	27.61	99.82
March	--	71.94	7.32	0.40	31.04	110.70
2014-15 (P)						
April	--	70.24	8.52	0.38	29.91	109.05
May	--	70.79	7.48	0.36	31.30	109.93
June	--	70.62	8.32	0.36	28.62	107.92
July	--	81.56	6.26	0.33	30.72	118.87
August	--	74.63	8.67	0.36	30.68	114.34
September	--	68.45	7.82	0.40	30.14	106.81
October	--	72.14	8.35	0.36	31.16	112.01
November	--	70.08	7.57	0.40	30.21	108.26
December	--	75.14	8.46	0.44	31.58	115.62
January	--	79.00	6.04	0.40	31.47	116.91
February	--	73.32	7.29	0.40	28.07	109.08
March	--	75.59	7.76	0.43	31.31	115.09
2015-16 (P)						
April	--	73.62	9.53	0.35	28.62	112.12
May	--	75.55	9.50	0.30	18.42	103.77
June	--	67.17	8.42	0.30	19.50	95.39
July	--	70.75	9.20	0.31	29.70	109.96
August	--	74.06	9.09	0.31	30.63	114.09

(P)= Provisional

Source : Office of the Textile Commissioner

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UPCOUNTRY SPOT RATES

(Rs./Qtl)

Standard Descriptions with Basic Grade & Staple in Millimetres based on Upper Half Mean Length [By law 66 (A) (a) (4)]							Spot Rate (Upcountry) 2015-16 Crop NOVEMBER 2015					
Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	2nd	3rd	4th	5th	6th	7th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	8605 (30600)	8605 (30600)	8605 (30600)	8605 (30600)	8605 (30600)	8605 (30600)
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	8745 (31100)	8745 (31100)	8745 (31100)	8745 (31100)	8745 (31100)	8745 (31100)
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	6636 (23600)	6636 (23600)	6636 (23600)	6636 (23600)	6636 (23600)	6636 (23600)
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	7114 (25300)	7114 (25300)	7114 (25300)	7114 (25300)	7114 (25300)	7114 (25300)
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	8042 (28600)	8042 (28600)	8042 (28600)	8042 (28600)	8042 (28600)	8042 (28600)
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	8942 (31800)	8942 (31800)	8970 (31900)	8998 (32000)	8998 (32000)	8998 (32000)
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	7845 (27900)	7845 (27900)	7874 (28000)	7874 (28000)	7874 (28000)	7874 (28000)
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	8127 (28900)	8127 (28900)	8155 (29000)	8155 (29000)	8155 (29000)	8155 (29000)
9	P/H/R	ICS-105	Fine	27mm	3.5.4.9	26	9026 (32100)	9026 (32100)	9055 (32200)	9083 (32300)	9083 (32300)	9083 (32300)
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	8070 (28700)	8070 (28700)	8099 (28800)	8099 (28800)	8099 (28800)	8099 (28800)
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	8464 (30100)	8464 (30100)	8492 (30200)	8492 (30200)	8492 (30200)	8492 (30200)
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	9223 (32800)	9223 (32800)	9251 (32900)	9280 (33000)	9280 (33000)	9280 (33000)
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	8773 (31200)	8773 (31200)	8802 (31300)	8802 (31300)	8802 (31300)	8802 (31300)
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	8942 (31800)	8942 (31800)	8942 (31800)	8942 (31800)	8942 (31800)	8942 (31800)
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	8886 (31600)	8886 (31600)	8914 (31700)	8914 (31700)	8914 (31700)	8914 (31700)
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	9055 (32200)	9055 (32200)	9055 (32200)	9055 (32200)	9055 (32200)	9055 (32200)
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	8970 (31900)	8970 (31900)	8970 (31900)	8970 (31900)	8970 (31900)	8970 (31900)
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	9083 (32300)	9083 (32300)	9083 (32300)	9083 (32300)	9083 (32300)	9083 (32300)
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	9336 (33200)	9336 (33200)	9336 (33200)	9336 (33200)	9336 (33200)	9336 (33200)
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	12654 (45000)	12654 (45000)	12654 (45000)	12654 (45000)	12654 (45000)	12654 (45000)

(Note: Figures in bracket indicate prices in Rs./Candy)