

Cotton and Water Use

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African Cotton and Textile Industries Federation (ACTIF). He served as executive director of the International Cotton Advisory Committee (ICAC) and has also worked at the United States Department of Agriculture for five years, analyzing the U.S. cotton industry and editing a magazine devoted to a crosssection of agricultural issues.

Resource use is a critical factor in all production systems. With the world population growing to more Dr. Terry Townsend than 9 billion by 2050, combined with

rising incomes leading to increased commodity consumption, there will be increased pressure on the use of agricultural land, water and energy. Cotton will be competing with other users, both agricultural and non-agricultural, for access to resources, and all farmers will be under pressure to raise yields per hectare, yields per liter and yields per calorie in order to remain viable in the economy of the future.

Water is important to increase yields and to improve cotton quality, and cotton production is limited by water supply in most countries, whether irrigated or rainfed. Cotton can grow with minimal amounts of water, or if water is available it can utilise significant amounts at certain times during its production cycle. Requirements vary widely depending on region, length of growing season, climate, cultivar, irrigation method and production goal, and range from 600 to 1200 mm. The relationship

between yield and water use for cotton is linear other things equal, more water means more cotton.

Among major producing countries, nearly 100%

of cotton production is irrigated in Western China, Egypt, Northern India, Pakistan, Turkey and Uzbekistan; about 90% of production is irrigated in Australia and Eastern China; about three-fourths of production is irrigated in the United States, and about onethird of production in Central and Southern India is irrigated.

Water use can be measured and reported in a range of ways, often referred to as a measure of "water use efficiency" (WUE). Various metrics are used in describing WUE, including

evapotranspiration (ET) of water from the field. Water crop productivity (WCP) is an index that measures the production associated with the water use. Irrigation water use index (IWUI) is defined as the quantity of output per volume of water applied through irrigation. The gross production water use index (GPWUI) is similar to the IWUI, but includes seasonal rainfall and stored soil moisture at the start of the season. Water use efficiency percentage (WUE) (%) is the ratio between the amount of water actually used (ET) and the amount of water withdrawn or diverted from its source (river, lake, etc.). It is sometimes also referred to as "water supply efficiency" or "irrigation efficiency."

Three significant sustainability issues associated with water management are relevant to cotton: 1) water depletion (irrigated cotton only), 2) soil salinisation (generally associated with



irrigated cotton) and 3) water pollution, including eutrophication (relevant to both irrigated and rainfed cotton production).

Water Depletion: Cotton cultivation accounts for an estimated 3% of the world's irrigation water (Hoekstra and Chapagain, 2007), which is proportional to cotton's share of global arable land. While water withdrawal for irrigation can be sustainable if the amount of water withdrawn is replenished by equal amounts in a timely manner, over-withdrawal can occur when removal for irrigation exceeds replenishment over a number of years.

Salinisation of soil results from evaporation of water and leads to higher concentrations of mineral deposits in the root zone. With irrigated cotton, soil salinisation is a consequence of limited drainage, combined with the application of saline or sodic water. One estimate is that in six leading cotton-producing countries, 12–36% of the irrigated area was damaged through salinisation (Dinar, 1998).

Water Pollution: Pollutants (pesticides and fertilizers) can affect freshwater quality. The main pathways for pollutants into rivers and bodies of water are spray drift during application, water runoff from fields and soil erosion. The likelihood of spray drift occurring and reaching water is influenced by weather conditions at the time of application, the method of application, crop stage and the distance between the crop and the water. Pesticides and fertilizers can be transported when dissolved in water or attached to soil particles carried by runoff water. Therefore, minimising runoff and erosion will reduce the risk of pesticides and fertilizers contaminating water bodies. Water eutrophication is a specific form of pollution in which nitrogen and phosphorous reach bodies of water and cause excessive growth of algae.

Why is cotton produced in arid and semiarid regions?

Cotton is often criticised as being a "thirsty" crop (World Wildlife Fund) or for consuming water that would otherwise go to "better" uses. A recent story in the Guardian (http://www.theguardian.com/ sustainable-business/2015/mar/20/cost-cottonwater-challenged-india-world-water-day) implies that 100 million people in India do not have access to safe drinking water because of cotton exports.

While there are many metrics that can be used in describing water use efficiency, the measure most often reported in the general press and used by many NGOs is simply the kilograms of output per cubic meter of water use. As is always the case in agriculture, measures yields are highly variable, but there are averages that can be used to illuminate basic relationships.

Using average values of kilograms of output per cubic meter of water, cotton appears to be inefficient. As shown in the table below, more kilograms of wheat, rice, maize and soybeans can be produced per cubic meter of water than kilograms of cotton lint. By this measure, many NGOs criticise the cotton industry and imply that consumers should buy polyester clothing rather than products made of cotton.

But, you have to wonder, if cotton is inefficient in the use of a scarce resource like water, why do farmers grow it? Are they dumb?

Water Use Efficiency: kilograms per cubic meter of water

	WUE	Crop Value	Crop Value
	Kg/m3	\$/MT*	\$/m3
Rice	1.09	302	329
Cotton Lint	0.23	1,327	305
Seed Cotton	0.65	442	287
Wheat	1.09	165	180
Soybean	0.55	291	160
Maize	1.80	85	153

Source: Zwart & Bastiaanssen (2004), mean values shown

* Ten-year average 2001-2010

Wheat: No. 2 soft red winter, Gulf Ports, USA. Maize: No. 2 yellow, Gulf Ports, USA. Cotton: Cotlook A Index. (Seed cotton, assumed a ginning ratio of 0.33. Rice: Vietnam, 5%, DWP.

Soybean: U.S. Gulf Coast.

The reason farmers grow cotton in areas where water is scarce becomes apparent when you look at crop values. Yes, more kilograms of grains and oilseeds can be produced per unit of water, but a kilogram of wheat was only worth one-ninth as much as a kilogram of cotton during the decade of the 2000s; a kilogram of soybeans was only worth about one-fourth as much; and a kilogram of maize was only worth about one-twentieth as much as a kilogram of cotton. Only rice produces and economic return comparable to that of cotton, and rice is far more water intensive than cotton and can only be grown in areas of water surplus.

As shown, farmers choose to grow cotton in

regions of water scarcity because the resulting gross revenue is approximately double what they would receive growing wheat, maize or soybeans.

Cotton is a drought and heat-tolerant crop, and thus generally well suited to climates with low rainfall, and it is grown in many regions where precipitation is low. Irrigation is typically applied in these areas to ensure crop maturity and to stabilise and maximise productivity. Irrigated cotton accounts for half of all the land devoted to cotton production and is responsible for 73% of global cotton production.

Farmers grow cotton in areas where water is scarce because cotton can be grown in those areas and because cotton provides the best economic return on the use of a scarce resource. Regions are not arid or semiarid because cotton is grown in them. It is not correct to say that cotton requires more water than other crops; rather scarce water is applied to cotton because cotton makes better use of it than other crops would.

Furthermore, even if cotton exports from India were reduced to zero, there would still be 100 million people without access to safe drinking water. People do not have access to safe water because infrastructure has not been built, or family incomes are so low that they cannot afford water, not because cotton is grown in India.

Nevertheless, while it is sensible to grow cotton in regions that experience water scarcity, the cotton industry must continue to improve in the use of water to ensure that supplies are not depleted and that soil and water are not polluted.

(Adapted from a recent publication by ICAC and FAO: Measuring Sustainability in Cotton Farming Systems, Towards a Guidance Framework. http://www.fao.org/3/a-i4170e.pdf)

(The views expressed in this column are of the author and not that of Cotton Association of India)

Corrigendum

We regret an inadvertent error on page No.1 of COTTON STATISTICS & NEWS Issue No.3 dated 21st April 2015. In the Guest Column, the writer's name was erroneously published as Shri I.G. Dhuria instead of Shri. I.J. Dhuria.



A Hundred Years of Indian Cotton By Professor M.L. Dantwala

CHAPTER IX: LOOKING AHEAD

y now we have surveyed, rather hurriedly, a hundred years' evolution of the cotton trade. At the very outset we made a claim that raw cotton has conditioned many aspects of India's economic development. There is nothing presumptuous in this. Trade was the dominant raison d'etre of British rule in India. Synchronising as it did with the mechanical inventions in the cotton textile industry, it made raw cotton the base for its economic operations. The changing pattern of India's economy, therefore, revealed itself through cotton and the cotton trade. If purity in marketing was insisted upon, and marketing legislation was passed, it was because the Lancashire cotton industry was in need of clean, unadulterated cotton which could replace cotton from America. If trade associations were formed, they were formed by European merchants with a view to acquiring a better hold over the cotton trade. If a quicker and cheaper transport was instituted, it was because "immense quantities of cotton did not go to Bombay which were or might be produced for the British in the interior." We have to thank King Cotton for having drawn us into the new world economy, the economy of international trade, world prices and foreign exchange. All these hundred years, cotton has maintained its reputation for having the most efficient economic institutions built around it. There is no other commodity in India whose marketing is performed as economically as that of cotton. It has a well developed produce Exchange and a trading technique which can more than hold its own in international comparisons.

We, however, live in a dynamic world in which there is no finality about economic processes and technique. During these hundred years raw cotton has faced many revolutionary changes. The American Civil War opened for it new horizons which, however, soon disappeared. The establishment, within the country, of a textile industry during the latter half of the nineteenth century, once again made it an introvert. Then by the year 1896 cotton turned Eastward and Japan became the best foreign buyer, relegating the United Kingdom to the background. The growing consumption of cotton in the home market led to the establishment of the Indian Central Cotton Committee, which has from the outset made strenuous efforts to improve the spinning quality of Indian cotton. The Second World War has proved to be more momentous than the first as far as the fortunes of raw cotton are concerned. In the plan for "Grow More Food," cultivation of cotton came in for severe curtailment. For the 1945-46 season, the area under cotton was reported to be 14.5 million acres, i.e., 7 million acres less than the pre-War figure. There has been also a great qualitative change in the composition of India's cotton crop. The percentage of cotton with staple below 7/8" has declined to 34 from 71 in 1922-27. During 1945-46, we grew no more than 1.2 million bales of short-staple cotton against more than 4 million grown in 1922-27.

Food shortage is likely to persist for many years, and with it the need for a larger acreage under food crops. It is possible, therefore, that we may not be able to revert to the pre-war acreage of shortstaple cotton. If the policy of a drastic curtailment in the acreage under short-staple cotton becomes a permanent feature of our crop planning, it will have a revolutionary influence on the marketing and trade of raw cotton, which might once again cease to be a commodity for export. Our anxiety over the fate of orphan cotton has influenced our trade policy on more than one occasion. If side by side Indian begins to grow sufficient long-staple cotton for her textile industry, cotton may also cease to be an article of import. That will make our raw cotton economy self-sufficient. This, in its turn, will have a profound influence on the marketing technique and the raw cotton trade.

If, as a result of crop planning, raw cotton economy becomes self-sufficient, i.e., depending neither on exports nor on imports, it may be relieved of the dominating influence of foreign markets. That, however, does not mean that it will be completely free to develop its own dynamics, independently of, or, if necessary, contrary to, the fate of raw cotton elsewhere in the world. At best it will give the planning authority in India a firmer grip on the raw cotton economy, and policies of price stabilization may become slightly easier to implement. For, if we have to depend upon an export market, our prices must move in parity with world prices. Export subsidies of the type provided by the American Government are beyond the financial means of a country like India. The matter will not be so simple on the import side. India may grow all the cotton that her textile industry may need. But that is not

enough. She must grow this cotton at a cost which will enable her to supply it to the industry at a price that will compete favourably with the price at which foreign cotton of comparable variety may be available. Physical self-sufficiency does not give us economic impregnability. We can, of course, ban the imports, but that is a step, the consequences of which it is beyond the scope of this book to discuss.

Marketing of raw cotton is likely to be vitally affected by another post-war development, viz., the stabilization of agricultural prices, if at all it materializes. During the war, cotton prices were subjected to various control measures. The floorceiling method was tried, and in the course of its operation Government had to purchase large quantities of cotton. The Policy Sub-Committee on Stabilization of Agricultural Prices has submitted its report but the Government's policy on the question is not yet settled. Anyway marketing under price control will not be the same as marketing undertaken with a view to arriving at a price. In the former, price conditions marketing; in the latter marketing determines price.

The partitioning of the country and the nonaccession by a Major Indian State have complicated the problem in a manner which makes it difficult to forecast the repercussions. During 1945-46, out of the total crop of 3.4 million bales, areas now under Pakistan produced 1.4 million bales and Hyderabad produced 261,000. Staple-wise the position is as follows:

ON THE BASIS OF 1945-46 CROP									
Thousand bales									
Staple		Indian Union	Pakistan	Hyderabad					
Short (below 1/8")		807	238	159					
Medium (⁷ / ₈ " to 1")		962	1,089	102					
Long (over 1")		23	58						

ON THE BASIS OF 1938-39 CROP									
		Thousand bales	3						
Staple		Indian Union	Pakistan	Hyderabad					
Short (below 1/8")		2,380	429	380					
Medium (7/8" to 1")		707	956	127					
Long (over 1")			72						

We hope that the political partition will make no difference as far as the trade between different regions is concerned. If, however political frontiers degenerate into economic barriers, the Union Government will have to seriously reconsider its cotton policy. Most of the textile mills will be in the Indian Union. These have been consuming, during recent years, nearly 4 million bales of Indian cotton. The Indian Union's cotton production on the 1945-46 basis would be only 1.8 million bales. The Secondly, it will have also to decide whether it would retain the pre-partition ratio of short and long staple cotton or revise it in favour of the latter. Are there technological conditions favourable to such a revision? Once again, we submit that any attempt to lay down a line will be beyond the scope of this work.

In pre-war days, the Cotton Exchanges of New York, Liverpool and Bombay constituted the nerve-centres of the world market in raw cotton. These countries have different, though in a way complementary, raw cotton problems. The United States is the biggest producer of cotton but has to depend on exports for the disposal of as much as 40 to 50% of its annual production. The United Kingdom grows no cotton and has to import from abroad every bale of its 2 to 3 million bales consumption. Normally it produced 50% of its requirements from the United States of America. India is pre-war years consumed 60% of her own crop and exported the remaining. But she had also to import 7 to 8 lakh bales annually. Straddle trading linked up these markets and kept the prices more or less in step. Is this international price mechanism operating through Cotton Exchanges an absolute necessity? Does the system ensure efficiency and equity to all interested in the economics of raw cotton? Can we replace it without introducing arbitrariness in cotton economy? - though the fact that the system is selfadjusting does not mean that it follows any socially equitable pattern. It should be admitted that the selfadjusting system of free market mechanism due to the unequal strength of different interests influencing the price-making factors often results in injustice to some of them. On the other hand, a managed economy informed by a social purpose may make for better justice and equity; though there is a danger that it may substitute the political vote for the dollar vote, with no better result.

Whatever may be the answers to the above queries, one side of this Cotton triangle – New York, Liverpool, Bombay – is being obliterated. The Labour Government of the United Kingdom has decided to close the Liverpool Cotton Exchange. The Exchange was closed in 1941 as a war-time measure and importation of raw cotton was entrusted to the Cotton Control. It has now been decided to continue the scheme of central purchase of cotton and do away with the marketing mechanism of the Exchange. The British Government is satisfied that the system of centralised purchase which had been operating successfully during the war, can, in the future, enable supplies of cotton needed by Great Britain to be obtained atleast as economically as by private importation and with greater certainty and regularity. It may be pointed out that the success of Government buying during a period of rising prices is no indication of the soundness of the system. We are told that the Cotton Buying Commission would reap a profit of £25 million in the year ending 31st March 1946. Though it is proposed to leave this profit with the Commission as a kind of nest-egg to face the writing down of its stock which may become necessary when prices fall, it is doubtful whether such reserves will be sufficient to equate losses, in the event of a continuous and/or precipitous fall in prices. The experience of the Federal Farm Board of the United Kingdom must act as a check on our expectations.

The British experiment is certainly very consistent with the socialist ideology of the Labour Government, though the modus operandi must yet remain a matter of trial and error. With the scheme of Government purchases in full operation, prices will have none of the significance they have to-day. They will not represent an automatic equilibrium between demand and supply at a given time. The process of price-making will be replaced by a process of accounting, in the formation of which even noneconomic factors might enter. During the War, the Cotton Control based its prices for different types of cotton not directly on the cost of each type but in a manner designed to secure that the prices charged reflected the proper relationship between the types, having regard to the spinning qualities of each, so long as the total amount received for all cotton sold was sufficient to meet the total cost of purchasing it.

In the highly artificial market of the war period centralised purchases by Government did provide cotton to spinners at fairly low and stable prices. The main role of the Exchange - which Government propose to take over - however, is not so much to supply cotton to the spinner as cheaply as possible, as to assure the supply at a future date at known prices. Forward sales of cloth require that fluctuations in the price of raw cotton will not upset the estimated cost of producing cloth at the scheduled time. Exchanges by providing a system of hedging free the spinner from the worries of fluctuating prices. Any alternative system must provide this much needed protection to spinners - unless, of course, cloth prices too are controlled. The British Cotton Control first introduced a system whereby it gave a forward undertaking to sell to spinners cotton at current prices, the quantity being limited to requirements of 16 weeks. Later, anxious not to be burdened with stocks, it encouraged the spinners to buy and store supplies of cotton in excess of quantities required to meet their current needs, with a proviso to reimburse

or surcharge the spinners on their excess stock when the prices changed downwards or upwards.

Are there enough reasons for Government to take upon itself all this risk and bother? One benefit of the centralised buying scheme, as far as England is concerned, is that it will "slash off 90% of the clerical help needed to man the Exchange and private importers' offices." Every country may not have a similar acute problem of shortage of man-power. As far as marketing costs are concerned, it remains to be seen whether Government buying is cheaper than, and atleast as efficient as, buying through private channels. Elimination of speculation is certainly a desirable social aim. It is an accepted fact that you cannot run an Exchange without the speculation. Hedge trading alone cannot sustain a Futures market. It is an inevitable ingredient of Futures trading and, by implication, of the automatic or free price system. Speculation, so to say, provides the necessary roughage.

The future is thus imponderable and full of riddles. But the cotton merchants, we believe, will face it with courage and confidence. During the past 100 years they have weathered many storms. Fortunes have been made and fortunes have been lost, but the marketing of cotton has not been the poorer for that. Its technique has been continuously refined under the impact of the challenge of science, and hitherto science has not been able to baffle it. The trans-Atlantic cable, the steamship, the wireless and the tele-printer created difficult problems for the trade. And on each occasion they have been solved by introducing some new kind of trading technique.

True, the challenge of the socialist thought is something altogether different from that of science. It may strike at the very existence of the mercantile This premonition is unfounded. community. Whatever be the economic system - socialistic or capitalistic - the economic gap between the centres of production and the centres of consumption has to be filled up. We may do away with unconscionable profits, we cannot do away with economic and technical functions; and men will be needed to perform these functions. You may banish the speculator, you cannot wipe out the merchant, for the simple reason that you cannot eliminate economic processes involved in merchandising; the processes of buying, ginning, pressing, transporting, storing, etc. You may redefine the merchants' status and privileges, bringing them in tune with a social purpose. If all that our merchants want is honest work and honest bread, no economic system dare refuse these to them. And we have reasons to believe that a vast majority of the mercantile community desires no more.



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COTAAP Corner **Events for April 2015**

pril is the month of reflection and planning for the new planting season starting in May. In a continuous effort to empower farmers, Shri. Pradeep Gujarathi, Trustee, COTAAP, urged Dr. K. R. Kranthi (Director, CICR, Nagpur) to guide and introduce the next stage of technology innovation of High Density Plantation System (HDPS) for cotton production in Chopda.

The COTAAP field staff visited CICR, Nagpur to have a first-hand experience of this new farming technique developed by the visionary scientist Dr. K R. Kranthi, on April 15, 2015. The visit comprised a field study of varieties, a film on success stories, briefing on the working of CICR, Nagpur and most importantly, aQ&A session with the experts at CICR.

Dr. K.R. Kranthi warmly welcomed and addressed the entire team from COTAAP and appreciated COTAAP's success in implementation of its High Density Plantation (PPP) project undertaken during the last year in association with Mahyco Seeds Ltd., Arvind Mills Ltd. and the Government of Maharashtra.

In his presentation, Dr K. R. Kranthi advocated High Density Planting System (HDPS) as the future of cotton in India and among other things, highlighted the following:

 Instead of planting 11000 plants/hectare, it was better to plant 100,000 plants/hectare wherein even if the cotton bolls per plant was low, the total yield would increase because of the much larger number of plants per acre.

• Use of varietal seeds instead of hybrids and the judicious use of fertilizer and pesticides could definitely lead to increase in cotton yield and better returns to farmers.

After this presentation, Dr. K.R. Kranthi discussed various projects which could be undertaken in collaboration with COTAAP, Chopda, in the coming year. This message along with the film of success stories from Dr. K. R. Kranthi was shared with all the farmer coordination members in Chopda who are eagerly waiting to adopt this technology in the forthcoming planting season starting this May.

Another important event in April was the participation of COTAAP in the conference of World Economic Forum (WEF) -Government of Maharashtra PPP - IAD projects in Mumbai.

COTAAP is a partner in the PPP project with the Government of Maharashtra, Mahyco Seeds Ltd. and Arvind Mills Ltd., Ahmedabad, on developing the cotton value chain since last year. On April 24, 2015, a meeting was called to review the progress of all the projects in the year 2014-15 under PPP-IAD in Maharashtra in the presence of the Hon'ble Chief Minister of Maharashtra, Shri. Devendra Fadnavis. Additional Chief Secretary of Agriculture, Hon. Shri. Sudhir Goyal, Senior Director of WEF, Ms. Lisa Dreir and Commissioner of Agriculture Shri. Vikas Deshmukh also attended the conference.

All the 40 Project Coordinators from the running PPP-IAD projects gave presentations about their

respective projects implemented last year. COTAAPs project was among the most acclaimed projects, especially for successfully completing the project resulting in a win-win situation for all the stakeholders, and especially for providing maximum benefit to farmer through the new technology of HDPS.



COTAAP team at CICR, Nagpur



World Economic Forum, Government of Maharashtra PPP - IAD projects conference

COTTON EXPORTS FROM INDIA LAGGING FAR BEHIND THIS YEAR

The Cotton Association of India (CAI) released its March estimate of the cotton crop for the season 2014-15. The CAI has reduced the cotton crop for the season 2014-15 beginning on 1st October 2014 at 391.00 lakh bales of 170 kgs each. as compared to last month.

The main reason for reduction in the CAI's crop estimate by 5 lakh bales than compared with that released during the last month is untimely rain in the Central Zone.

The projected Balance Sheet drawn by the CAI for the year 2014-15 estimates total cotton supply at 460.90 lakh bales while domestic consumption is estimated at 310.00 lakh bales thus leaving an available surplus of 150.90 lakh bales. A statement containing the statewise estimates of the crop and Balance Sheet for the season 2014-15 with the corresponding data for the previous year is given below.

Exports are lagging far behind this year than that in the last year and there is only a limited demand for Indian cotton in the market at this moment.

CAI's Estimates of Cotton Crop as on 31st March 2015 (in lakh bales)

	Produc	Arrivals as		
State	2014-15	2013-14	on 31.03.15 (2014-15)	
Punjab	13.00	15.00	11.75	
Haryana	23.50	23.50	18.10	
Upper Rajasthan	6.50	5.50	5.90	
Lower Rajasthan	10.50	8.25	9.85	
Total North Zone	53.50	52.25	45.60	
Gujarat	116.00	129.25	79.50	
Maharashtra	80.25	87.00	66.75	
Madhya Pradesh	18.00	19.50	15.60	
Total Central Zone	214.25	235.75	161.85	

Telangana	54.00	78.00	52.25	
Andhra Pradesh	24.00	78.00	23.50	
Karnataka	32.00	29.00	25.50	
Tamil Nadu	7.25	7.25	5.00	
Total South Zone	117.25	114.25	106.25	
Total South Zone Orissa	117.25 4.00	114.25 3.00	106.25 3.00	
Total South Zone Orissa Others	117.25 4.00 2.00	114.25 3.00 2.00	106.25 3.00 1.75	

Note: (1) * Including loose

(2) Loose figures are taken for Telangana and Andhra Pradesh separately as proportionate to the crop for the purpose of accuracy

The Balance Sheet drawn by the Association for 2014-15 and 2013-14 is reproduced below:-

	(in lakh bales)
Details	2014-15	2013-14
Opening Stock	58.90	52.58
Production	391.00	407.25
Imports	11.00	11.75
Total Supply	460.90	471.58
Mill Consumption	274.00	266.68
Consumption by SSI Units	26.00	24.00
Non-Mill Use	10.00	10.00
Exports		112.00
Total Demand	310.00	412.68
Available Surplus	150.90	
Closing Stock		58.90

Production & Stock of Spun Yarn (SSI & Non-SSI)

(In Mn. Kgs.)

MONTH /		PRODU	CTION		STOCK				
YEAR	COTTON	BLENDED	100% N.C.	G. TOTAL	COTTON	BLENDED	100% N.C.	G. TOTAL	
2010-11	3489.77	796.47	426.38	4712.62	186.43	48.79	18.00	253.22	
2011-12	3126.34	789.29	457.08	4372.72	110.87	42.20	20.44	173.51	
2012-13	3582.68	828.19	456.75	4867.61	107.92	40.37	21.38	169.67	
2013-14 (P)	3928.27	896.20	485.00	5309.46	133.80	51.33	23.40	208.53	
2013-14 (P)									
April-13	316.61	65.91	39.68	422.20	121.99	41.07	21.94	185.00	
May-13	314.97	71.46	38.94	425.37	123.79	39.59	19.08	182.46	
June-13	317.69	71.18	38.95	427.82	117.62	36.75	17.84	172.21	
July-13	332.12	74.84	41.31	448.27	116.52	38.01	20.68	175.22	
Aug-13	336.29	78.66	42.21	457.17	120.07	37.18	18.27	175.52	
Sept-13	326.09	79.42	43.47	448.98	132.87	43.34	22.51	198.72	
Oct-13	328.80	78.03	43.05	449.88	132.74	49.76	25.43	207.93	
Nov-13	312.13	72.21	39.01	423.35	136.35	136.35 51.53		214.40	
Dec-13	341.67	80.55	40.41	462.63	132.43	53.00	24.27	209.69	
Jan-14	340.38	77.71	39.33	457.41	117.38	51.11	23.60	192.09	
Feb-14	321.31	71.27	37.21	429.80	128.59	54.60	25.79	208.99	
Mar-14	340.20	74.95	41.42	456.57	133.80	51.33	23.40	208.53	
				2014-15 (P)					
April-14	328.68	73.84	41.41	443.93	142.80	50.06	21.20	214.06	
May-14	332.92	74.77	42.71	450.40	139.60	46.20	20.80	206.61	
June-14	330.69	74.03	42.95	447.67	151.05	47.99	22.56	221.60	
July-14	340.00	78.51	44.85	463.36	160.20	51.30	24.18	235.67	
Aug-14	338.09	76.66	44.23	458.98	166.64	53.21	24.87	244.72	
Sept-14	334.03	77.91	42.55	454.49	167.53	51.73	24.02	243.28	
Oct-14	323.53	74.51	40.96	439.00	178.62	56.85	25.89	261.36	
Nov-14	336.05	71.75	41.88	449.68	173.16	54.37	24.86	252.38	
Dec-14	353.32	76.64	42.21	472.17	161.57	55.90	26.59	244.06	
Jan-15	351.79	77.53	43.67	472.99	164.19	55.49	24.47	244.15	
Feb-15	338.04	79.10	43.68	460.82	155.74	53.43	23.81	232.98	

P - Provisional Source : Office of the Textile Commissioner



COTTON STATISTICS & NEWS ADVERTISEMENT RATES

effective from April 2014

RATES PER INSERTION

	For C	Al Memb	ers For Non-Members
Full Page	Rs. 1	0,000	Rs. 11,000
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Mechanical Data: Full page print area: Half page print area :	172x250 mm (Non E 210x297 mm (+ Blee 172x125 mm (Non E 148x210 mm (+ Blee	Bleed Ad) ed) Bleed Ad) eed)	To advertise, please contact: Shri Divyesh Thanawala, Assistant Manager Cotton Association of India, Cotton Exchange Building, 2nd Floor, Cotton Green (East), Mumbai – 400 033 Telephone No.: 3006 3404 Fax No.: 2370 0337 Email: publications@caionline.in

	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	(Upcour APRI	ntry) 201 L 2015	4-15 Cro	р
Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	20th	21st	22nd	23rd	24th	25th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	9223 (32800)	9280 (33000)	9336 (33200)	9336 (33200)	9476 (33700)	9476 (33700)
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	9364 (33300)	9420 (33500)	9476 (33700)	9476 (33700)	9617 (34200)	9617 (34200)
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	6496 (23100)	6496 (23100)	6524 (23200)	6524 (23200)	6524 (23200)	6552 (23300)
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	7620 (27100)	7620 (27100)	7620 (27100)	7620 (27100)	7677 (27300)	7705 (27400)
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	8042 (28600)	8042 (28600)	8042 (28600)	8042 (28600)	8099 (28800)	8127 (28900)
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	9308 (33100)	9336 (33200)	9392 (33400)	9476 (33700)	9561 (34000)	9701 (34500)
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	8042 (28600)	8127 (28900)	8183 (29100)	8211 (29200)	8267 (29400)	8323 (29600)
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	8464 (30100)	8464 (30100)	8492 (30200)	8520 (30300)	8577 (30500)	8633 (30700)
9	P/H/R	ICS-105	Fine	27mm	3.5.4.9	26	9392 (33400)	9420 (33500)	9476 (33700)	9561 (34000)	9645 (34300)	9786 (34800)
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	8436 (30000)	8436 (30000)	8492 (30200)	8520 (30300)	8577 (30500)	8633 (30700)
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	8773 (31200)	8773 (31200)	8802 (31300)	8830 (31400)	8886 (31600)	8942 (31800)
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	9561 (34000)	9589 (34100)	9645 (34300)	9729 (34600)	9842 (35000)	9983 (35500)
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	9195 (32700)	9195 (32700)	9223 (32800)	9251 (32900)	9308 (33100)	9364 (33300)
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	9223 (32800)	9223 (32800)	9251 (32900)	9280 (33000)	9336 (33200)	9392 (33400)
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	9364 (33300)	9420 (33500)	9448 (33600)	9505 (33800)	9561 (34000)	9617 (34200)
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	9336 (33200)	9336 (33200)	9364 (33300)	9420 (33500)	9476 (33700)	9561 (34000)
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	9645 (34300)	9645 (34300)	9645 (34300)	9729 (34600)	9814 (34900)	9870 (35100)
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	9954 (35400)	9954 (35400)	9954 (35400)	10039 (35700)	10067 (35800)	10123 (36000)
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	10179 (36200)	10179 (36200)	10179 (36200)	10264 (36500)	10292 (36600)	10348 (36800)
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	12373 (44000)	12373 (44000)	12654 (45000)	12795 (45500)	12935 (46000)	13076 (46500)

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