Weekly Publication of

Cotton Association of India

COTTON STATISTICS & NEWS

Edited & Published by Amar Singh

2015 • No. 53 • 31st March 2015 Published every Tuesday

Cotton Exchange Building, 2nd Floor, Cotton Green, Mumbai - 400 033
Phone: 30063400 Fax: 2370 0337 Email: cai@caionline.in
www.caionline.in

Why Shouldn't Countries Build Buffer Stocks ?

With a Ph.D. in Agricultural and Resource Economics from Oregon State University in the USA, Dr. Terry Townsend is a consultant on commodity issues. He is currently working with the 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 cross-section of agricultural issues.

EXPERT's Column

Dr. Terry Townsend

In mid-March 2015, the Ministry of Textiles of the Government of India floated a proposal to guard against year-to-year fluctuations in cotton production by limiting exports in order to build a "reservoir" for use by the domestic textile industry (Business Standard, March 18, 2015).What's wrong with this proposal?

The concept of buffer stocks is an old one. The proposal by the Ministry of Textiles is a variant on the old theme of buffer stocks, no matter what name, "reservoir" or any other, they may choose to employ.

Member governments of the International Cotton Advisory Committee considered establishing international buffer stocks in 1939, 1952-54, 1967, and 1978-81. None of the attempts to achieve an international consensus were successful, not because of philosophical opposition, but because the logistics of operating an international buffer stock could not be agreed upon. Issues such as deciding which country's cotton should be purchased and held, how to account for quality differences, where stocks should be held and at whose expense, prevented agreement.

In the absence of an international consensus, there have been national efforts over the years. The United States inadvertently established a de facto buffer stock between 1983 and 1986 when market prices remained consistently below the loan rate. The Soviet Union maintained a strategic reserve, although the size was never acknowledged. During the Mao era, China maintained strategic reserves of cotton in each province and smaller cotton countries, like South Africa during the apartheid era, have also maintained strategic reserves. More recently, China built a state reserve of more than ten million tons of cotton between 2011 and 2013. And other countries with other commodities also practice resource nationalism; for example the United States blocks exports of crude oil to benefit domestic refiners and consumers.

So, why shouldn't India, or any other country, do the same with cotton?

Carrying Costs:

Many government employees, perhaps including those in the Ministry of Textiles who are making this proposal, have little or no experience in private industry, and the concept of carrying costs may seem trivial. But, in a commodity industry characterised by large volumes and low margins, carrying costs can be crucial.

In round numbers, the cost of storing cotton in India at current prices is around U.S. 1.5¢ per kilogram per month (nearly one rupee per kilogram per month), which is mostly interest on the value of cotton at 12% per year with prices currently near 70¢ per pound.Warehousing costs of about 50¢ per bale per month (Rs. 30 /bale/month) and storage insurance of 0.05% per year, add marginally to the monthly cost of carrying inventories. While 1.5¢ per month per kilogram may not seem like much, in a year these costs amount to 18¢ per kilogram or $31 per 170-kilogram bale (Rs.1,900/bale). If the Ministry of Textiles wishes to establish a "reservoir" of one month's worth of Indian mill use, or 440,000 tons, the cost of carry for one year would be US$6.6 million (Rs.410 million). Someone will have to pay this cost. If the Ministry of Textiles absorbs the cost of carry for a national reservoir, Indian taxpayers will be subsidising the supply of cotton for textile mills. If the private sector is forced to cover these costs, ginners and merchants will pay lower prices to farmers or charge higher prices to textile mills, rendering the Indian cotton value chain less competitive in the world economy.

Uncertainty:

Any analyst can look at past statistics on cotton supply and use, and with the benefit of hindsight, say with certainty that the government or industry should have purchased cotton here when prices were low and sold them there when prices were high. It all looks neat and obvious on paper. However, in reality, forecasting cotton production is very difficult, and no one can consistently anticipate crop yields from one season to the next.

As the Ministry of Textiles notes, cotton production fluctuates from year to year, but no one knows this year if there won't be another good/poor harvest next year. If production is large several years in a row, the "reservoir" will build, resulting in even more carrying costs. If production is low several years in a row, the "reservoir" will be exhausted, leaving textile mills unprotected.

Anticipating when to build a "reservoir" and when to liquidate the "reservoir" is very difficult. As China's recent experience illustrates, it is a near certainty that government officials will get it wrong. This is why decisions related to inventory management are best left to the private sector. Indian textile mills, like their counterparts around the world, are free to build their own physical inventories if they wish, or to contract in advance for future deliveries or to hedge in futures markets. Fibre inventory management is a crucial component of textile mill success, and those mills that manage inventories wisely will prosper, those that do not will fail, and over time industry becomes more efficient and productive.

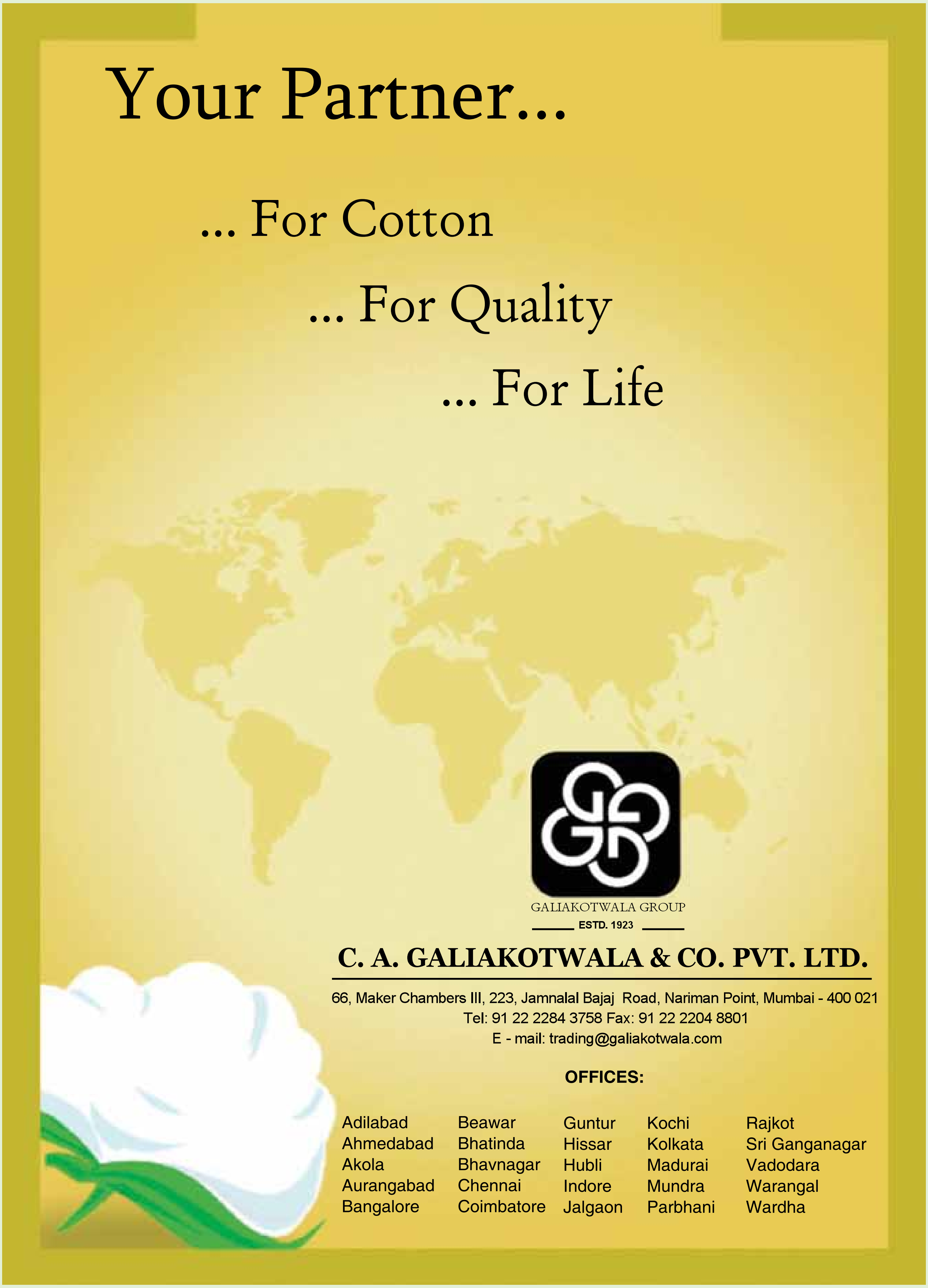
Stocks Depress Prices and Discouraging Production:

The existence of a "reservoir" will in and of itself depress prices paid to farmers. Demand for cotton, or any other commodity, at any moment is composed of several components, including demand for immediate consumption and demand for stocks to hedge against future consumption. Knowing that a "reservoir" exists, the private sector will reduce purchases to cover only needs for immediate consumption. This is the fundamental reason why prices fall whenever stocks are high.

Poor Quality, Quality Deterioration & Fraud:

Cotton is a storable, durable commodity that can maintain its value for months and even years if properly stored. However, proper storage is expensive, requiring controlled environments with proper humidity, and conditions are rarely optimal. As a consequence, most cotton deteriorates in colour over time.

A related problem is that, other things being equal, both domestic and international buyers desire higher qualities of cotton. Therefore, almost by definition any cotton left over at the end of a season to be placed in a "reservoir", will tend to be below average in quality. As a consequence, when cotton from the "reservoir" is needed a year later, it will almost certainly not match the qualities that textile mills desire.


Your Partner...
... For Cotton
... For Quality
... For Life
GALIAKOTWALA GROUP
ESTD. 1923
C. A. GALIAKOTWALA & CO. PVT. LTD.
66, Maker Chambers III, 223, Jamnalal Bajaj Road, Nariman Point, Mumbai - 400 021
Tel: 91 22 2284 3758 Fax: 91 22 2204 8801
E - mail: trading@galiakotwala.com
OFFICES:
Adilabad
Ahmedabad
Akola
Aurangabad
Bangalore
Beawar
Bhatinda
Bhavnagar
Chennai
Coimbatore
Guntur
Hissar
Hubli
Indore
Jalgaon
Kochi
Kolkata
Madurai
Mundra
Parbhani
Rajkot
Sri Ganganagar
Vadodara
Warangal
Wardha

Finally, in any government program of managed inventories in which billions of Rupees are at stake, fraud will occur. Fraud occurred in the United States in the 1980s, in the Soviet Union in the 1980s, and it is evidently occurring in China now. If the government of India mandates the formation of a "reservoir" of cotton, it is inevitable that qualities and quantities destined for the "reservoir" will be falsified, inventories will be stolen, and warehouse charges will be padded. When it comes time to use the cotton from the "reservoir," cotton that existed on paper won't be there in reality.

Rent-Seeking Behaviour Expands:

A major beneficiary of any government proposal to intervene in markets is the domestic airline industry as association executives fly to the national capital to plead for or against the proposal. In economics, benefits conferred by government policies are described as "rents," and when governments propose market interventions, executives in the industries to be affected by the proposal are quick to board planes to lobby on behalf of their interests. Instead of staying at home and working to make better products at lower costs so as to be increasingly productive, industry representatives feel compelled to "communicate their concerns" to government officials to ensure that decisions do not adversely affect their interests.

However, rent-seeking behaviour is inherently a zero-sum game, meaning that the benefits that might accrue to any one segment will necessarily represent losses to other segments of the value chain. Rent-seeking behaviour is in and of itself a deadweight loss on social welfare and government proposals to intervene in commodity markets always engender more rent-seeking behaviour.

Trade Retaliation:

India is a member of the World Trade Organization (WTO) and also participates in numerous regional trade bodies and bi-lateral free trade agreements. India is now the largest cotton producer and second largest exporter and benefits from trade access to the markets of countries around the world. Efforts by India to protect the interests of its domestic textile industry by limiting cotton exports, either through regulation or taxation, will harm the interests of trade partners, especially Bangladesh and Pakistan. Inevitably, there will be repercussions in the form of international ill will, reduced cooperation and possibly even future retaliation.

Freedom:

As reported in the same story carried in the Business Standard, the Indian Ministry of Commerce has replied to the proposal by the Ministry of Textiles by noting that in a free market, producers should be free to sell to whomever wishes to buy, including domestic or international customers. It is self evident that the Ministry of Commerce is correct. Otherwise, why have free markets at all?

Precedent:

If the Ministry of Textiles proposes to limit exports of cotton to ensure a "reservoir" for domestic use, why not also limit exports of yarn to ensure that weavers and knitters are protected, or limit the exports of fabric to ensure supplies for domestic tailors, or limit the exports of clothing to ensure enough for domestic consumers? Interventions in markets always engender more interventions in markets as industry segments compete for government favours through ever more vigorous rent-seeking activities.

Conclusion

Buffer stocks to cushion variations in commodity supply and prices have been tried many times in many industries by many countries, and they have all failed. There are reasons why governments eschew such policies. Government interventions in markets through the creation of buffer stocks result in higher inventory expenses, lower prices paid to farmers, a mismatch between qualities available and qualities desired, fraud, rent-seeking behavior, trade retaliation, a curtailment of freedom and yet more interventions as government officials try to offset the distortions caused by the first intervention.

All segments of the cotton value chain in India would be well advised to oppose the proposal by the Ministry of Textiles to create a "reservoir" of cotton by curtailing exports, and the Ministry of Textiles would be well advised to allow this proposal to quietly slip under the table and die a merciful death.

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

Conventional Breeding of Cotton Needs to Change

Conventional breeding has led to improvements in productivity, fiber quality and tolerance to biotic as well as abiotic stresses. In the recent past, biotechnological methods have contributed to the incorporation of resistance to bollworms, but breeders have to use conventional breeding approaches to develop and induce changes in transgenic plants. There is a growing need to revise the procedures used in plant breeding, as well as in the steps required in handling segregating generations, by applying the principles of population genetics and quantitative genetics for achieving greater genetic gains (Patil, 2011). The principles of the population improvement schemes, followed in cross-pollinated crops, may also be applied by introducing slight changes to suit the mating system and thereby obtaining greater genetic gains in varietal improvement. Schemes designed to improve combining ability have played an important role in the hybridization of maize and these principles should also be tried and applied to increase genetic diversity in cotton.

The Need to Revise Breeding Approaches

Cotton is a unique crop in which the methods used to develop varieties as well as those employed in obtaining commercial cotton hybrids have been exploited with a view to bringing improvements in productivity and quality. The very nature of its floral biology and the ease with which crosses can be made manually made it possible to commercialize the benefits of heterosis in cotton. The advantage implicit in the ease with which cotton can be emasculated and manual crossings performed also makes it possible to simulate random mating and thus extend the procedures of population improvement. Whether one is investing in efforts aimed at varietal development or at the creation of hybrids, it is of paramount importance to ensure that the first step taken by the breeder is making the right choice of genetically diverse parents that complement each other in an entire range of traits that contribute to seed cotton yields.

Not enough effort has gone into research of the systems used in breeding cotton. Such efforts could have helped in understanding how much can be done with the three classical methods of handling segregating generations: in bulk, by pedigree or through single seed descent (SSD). These methods are capable of exploiting the variability potential released in different situations resulting from crossing two varieties. Neither has enough work been done to determine the genotype targeted in hybridization. That determination depends on the proportion of desirable alleles distributed between parents. There are limited studies on planning situation-dependent modification of the methods used to handle segregating populations after hybridization in order to increase the frequency of desirable target genotypes in the base population. It is possible to enhance the genetic improvement achieved by subjecting the segregating populations to modified selection procedures.

Application of the Genetic Principles that Limit Crossings in Mating Systems

Conventional approaches to varietal improvement, as defined for self-pollinated crops, sometimes fail to produce the desired results in terms of the gains derived from genetic improvement. The results of each effort made by breeders to achieve hybridization and selection in segregating generations are not documented in enough detail to be able to understand whether the breeder failed or succeeded and, either way, to what extent did he succeed in blending the desirable yield-influencing alleles distributed between the parents to derive a potential variety. Many of the principles of varietal improvement followed in cross-pollinated crops are capable of being extended to cotton breeding.

Consequences of Random Mating and Polygenic Equilibrium

A detailed understanding of the consequences of random mating and the procedures defined for cross-pollinated crops is indispensable when determining the modifications that can be adopted to enhance the procedures used for varietal improvement in a self-pollinating crop like cotton. The performance of a given population in a cross-pollinated crop can be considered reliable only when it is in a state of equilibrium. This transformation of the population from a state of disequilibrium to one of equilibrium at each locus point requires just one generation of random mating and is hence included as an essential step in every population improvement scheme implemented in cross-pollinated crops.

The equilibrium status derived from considering loci simultaneously is different from the status derived from considering loci individually. There are two stages that must be traversed in attaining joint equilibrium determined by randomness in the association of alleles to form digenic gametic types and the union of the gametic types needed to give rise to digenic genotypes. The first phase of randomness in the association of alleles originating in the two loci to form gametic types leads to equilibrium in the gametic phase; then the randomness in the union of these gametes coming from the male and female sides gives rise to zygotic phase equilibrium.

Despite the fact that, theoretically, an infinite number of generations of random mating would be required to ensure attaining gametic phase equilibrium, just a few generations are enough to bring the deviation from gametic phase equilibrium closer to zero and thus ensure polygenic equilibrium. So, just a few generations of random mating are required in any population before releasing it as a variety, irrespective of whether or not it is improved as a synthetic/ composite or developed through any other population improvement scheme. In a state of polygenic equilibrium, coupling as well as repulsion phase gametes are produced with sufficient frequency to ensure recombination among the linked desirable and undesirable alleles distributed between the parents. Similarly, when the goal in a self-pollinated crop is to accumulate the alleles for a given trait in a trait-based population, it becomes necessary to encourage inter-mating in a population developed through multiple crosses among lines selected for high expression of the trait. Inter-mating in such populations helps break undesirable linkages. Such trait-based populations can be developed in cotton through simulated random mating which spins off desirable recombinants that comprise different desirable alleles. Such populations can be maintained at one central location so that they are available to be supplied to other teams.

Integration among Segregants Derived by Hybridization

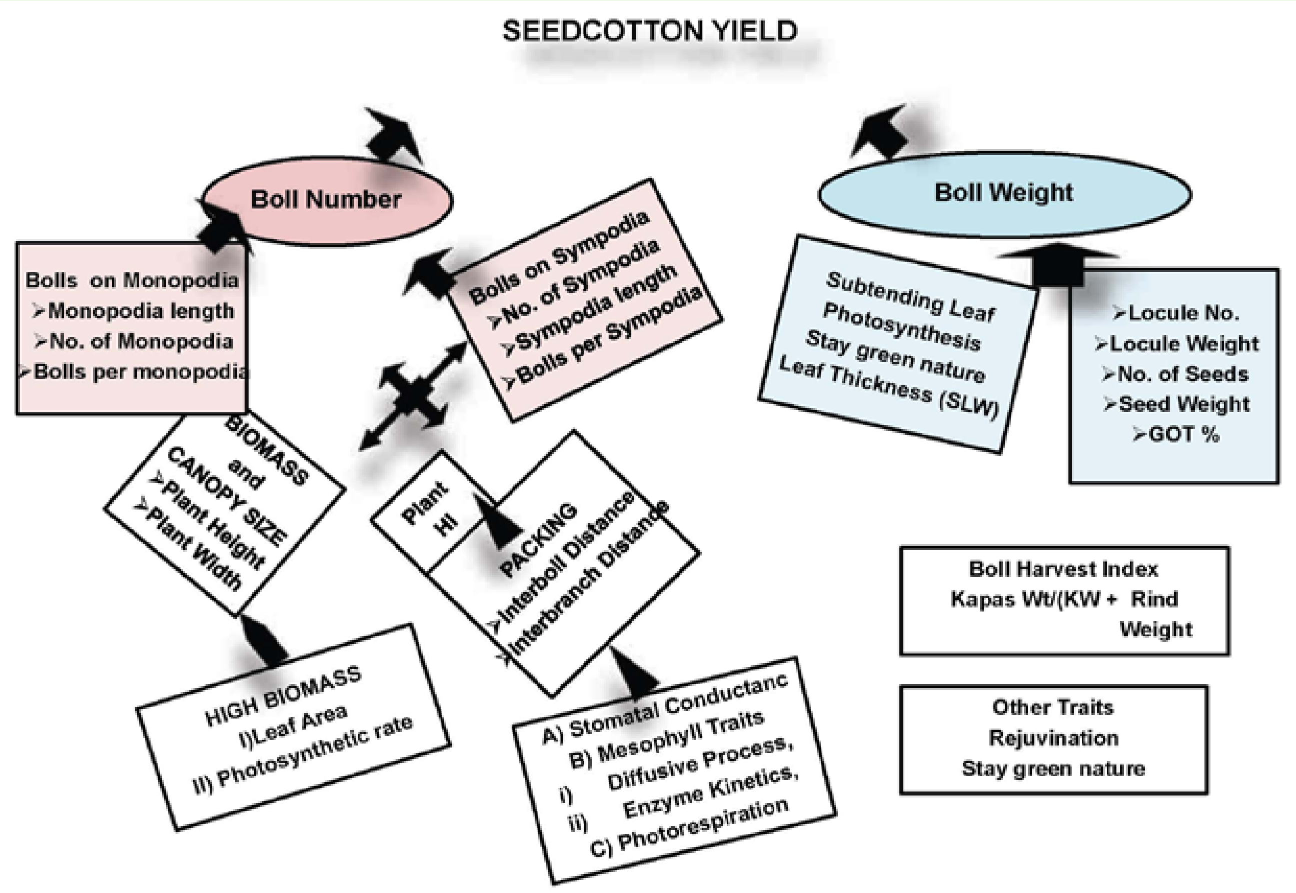
The innovative approach based on inter-mating among productive segregants of early segregating generations also helps in breaking undesirable linkages among desirable alleles of the hybridized parents. Instead of following the pedigree, bulk or single seed descent (SSD) procedure in a routine manner, breeders can introduce inter-mating among desirable productive segregants in order to increase the probability of obtaining useful recombinants.

The method of developing trait-based populations helps in accumulating and constantly enriching populations with alleles that are desirable for a single trait or for many traits. A number of varietal lines, or a germplasm collection with the highest expression, may be used to develop breeding material for each important yield-determining trait, such as boll weight, fiber quality components, important physiological traits that influence biomass, harvest index, stay green nature, rejuvenation, tolerance to biotic and abiotic stresses, and others. Once these component lines are used in multiple crosses to pool the desirable alleles of the trait distributed among them, the population can be subjected to simulated random mating to ensure recombination of alleles and to overcome undesirable linkages. These populations approach polygenic equilibrium, and thus, coupling and repulsion phase gametes occur at the level expected when the genes segregate independently. Such a population spins out new recombinant lines with high expression for the desired trait. These populations can be developed and kept at the proposed Asian cotton research institute or international cotton research institute or at leading national institutes.

They can also be distributed to breeders of different member countries so they can use selfing to isolate lines with a high level of expression for these component traits. The lines that have been improved for desired component traits can be utilized to foster variability to be able to select for productivity and other traits. The other option would be to cross the trait-based populations with different yield traits at the institute level and then distribute them to breeders, who can later manipulate the segregating populations to derive better recombinant lines by pooling the desirable alleles for different desirable yield component traits, fiber quality and pest or disease resistance, according to the priority in the relevant region or country.

Important Traits for Determining Productivity

Presence of insect-resistant biotech gene(s) increases setting of bolls right from square one and thus enhances the sink capacity of the plant while leaving its source unaffected. This can lead to mismatches between source and sink that, in turn, lead to exhaustion of the source capability by causing a reduction in boll weight, especially in the upper half of the plant. To enhance boll setting, even in the upper half of the plant, the genotypes chosen to develop biotech cotton varieties must have a stronger source and the leaves must stay green for a longer time. The source and sink capabilities of a cotton plant are determined by a broad array of physiological traits, so that breeders must select parental varieties that complement each other for these many traits if they expect to achieve improvements in productivity.



Apart from these physiological traits that influence biomass and its translocation to sink, there are other traits that influence desirable fiber properties (such as stress resistance and so on) that must also be taken into account when selecting parents for hybridization and genetic improvement. Pooling of multiple and divergent traits may require involvement of more than two parents (multiple crossings) in hybridization. The common proportions of allelic contributions involving additional parents can be 50:25:25; 25:25:25:25; 50:12.5:12.5:12.5:12.5 or even more complex configurations. Based on the foregoing, appropriate multiple crossing patterns can be designed to garner the required proportion of alleles from each set of selected alleles. Success or failure in recombining and pooling the desired alleles distributed among these parents will depend on the choice of breeding methods and need-based modifications in manipulating segregating generations.

Approaches to Varietal Improvement and Target Genotypes

End-product success in any breeding program will depend on having a clear knowledge of the inheritance patterns of the large number of genes that determine the expression of these component traits. Limited knowledge is available on the complexity of the inheritance patterns of each of the components influencing seed cotton yield and other important traits. Success may depend on the breeder's ability to get around these limitations and still manage to be as scientific and analytical as possible in choosing the approaches and the protocols to be followed within each procedure designed to create variability. If the F1 turns out poorly, the cross can easily be rejected. If, on the other hand, its performance is superior, for reasons other than over dominance, it may be due to complete dominance, especially when parents are selected with perfect complementarity for desirable component traits. In self-pollinated crops like cotton, even loci showing complete dominance can be useful (for initiating artificial selection) if the breeder can wait until the F6 generation, or so, when there is a reduced level of heterozygosity. A comparison among F2's is useful in determining if a high degree of over dominance plays a role of any import in determining a high degree of expression of heterosis in F1 generations. Before actually getting into the hybridization process, breeders should have a clear idea of the constitution of the new variety they are hoping to develop. This clear idea then forms the basis for targeting of the goal of varietal improvement (i.e., the "Target Genotype") in terms of the proportion of alleles required from the parents chosen for hybridization (Patil, 2012). Genotype targeting can be defined in terms of multiple parents or two parents, but, for the sake of simplicity, we have preferred to use only two parents in our hybridization example. The methods used to handle the genetic material after hybridization can be by the pedigree, bulk, single seed descent (SSD) or back cross method. In cases where the donor parent has a highly undesirable genetic background, except for the one desirable simply inherited trait that would complement the otherwise superior variety, back crossing is done to enhance the probability of that trait being handed down to the target plants.

Proportions of Alleles from two Parents in the Pedigree/ Bulk/SSD Methods

What is the target genotype set in these two groups of Selfed Generation Breeding (SGB) methods such as pedigree, bulk or SSD? Are these selfing methods effective in generating a high frequency of the target genotype? Segregating generations derived from all these methods of handling segregating generations reveal a high proportion of plants containing a nearly 50:50 share of alleles from the two parents. If the two parents share equal amounts of desirable alleles or yield components (roughly) between them, the Pedigree/Bulk/SSD methods are the ideal choice of breeding method. If there is an unequal distribution of desirable alleles (yield traits) between the parents, then the target genotype might turn out to be 70:30 or 80:20… and hence these three methods of varietal improvement would not be appropriate because the frequency of a 70:30 or 80:20 distribution is considerably reduced in segregating generations. This explains why these methods sometimes fail to produce the desired results, i.e., when the target genotype is not fully understood and the wrong approach is followed. The breeder must understand the pattern of distribution of desirable alleles between the parents chosen for hybridization because this distribution will determine the genotype targeted for development from the combination of parents chosen for the hybridization process. Determining the target genotype is possible by comparing the F2 stage with the two backcross populations, B1 and B2, for potentiality and frequency of transgressive segregants. The studies done by Patil in 2007, 2011 and 2012 have shown how inferences may be derived in identifying the target genotype and also in handling such segregating populations enriched with a higher frequency of a target genotype.

If a technique could be developed to carefully study the characteristics of the parents in order to detect given arrays of component traits, as well as the large number of polygenes governing their expression, that technique might also be key in determining whether manipulation of selfed generations (after hybridization) can be fruitful or limited back cross derived populations need to be processed to enhance the frequency of the targeted genotype. When the entire array of yield influencing traits needs to be considered, it may be difficult to arrive at a correct characterization of the genetic constitution of the parents involved in the hybridization process, that is, in terms of the distribution of desirable alleles between them. Instead, they may be roughly characterized in terms of desirable or undesirable expressions. In fact, there is a need to standardize techniques if we hope to understand the parents thoroughly. With respect to these traits, and based on the distribution pattern of desirable expression for these different traits, the target varietal genotype may be roughly defined as having a proportionality of, say 70:30 or 80:20. Further research needs to be done into the very nature of the breeding systems used in order to find the answers to these questions.

Exploitation of Heterosis and Approaches to Breeding Hybrids

Patil and Patil (2003) and Patil et al. (2007, 2011) stressed the need to develop heterotic groups and adopt population improvement schemes designed to increase the performance of hybrids by adopting suitable modifications in the procedure to suit the mating system of self-pollinated crops. Based on consistent superior performance of hybrids among a large number of crosses tested over years, (Patil, 2009; Patil, 2012) attempted to understand the complementation mechanism observed with respect to plant types and physiological traits. Based on this information, a number of heterotic groups were formed, e.g., compact group, bushy group, stay green group, quality group, robust types with a high relative growth rate (RGR) and high harvest index. These groups are constantly revised by testing and adding new lines. Elite combiners of the opposite groups are utilized as heterotic boxes and the variability released for combining ability is evaluated in the F4 generation by implementing reciprocal selection in order to improve their combining ability. The improvement made in getting transgressive segregation for combining ability is quantified. Efforts are being made to develop broad-based populations of each heterotic group for distribution among breeders. Since cotton, as a crop, has not given any sign of inbreeding depression per se, the performance of lines can be determined for the initial assignment of genotypes to the broad heterotic groups to make a reasonable prediction of the pattern of complementation with genotypes of other groups. Efforts have also been made to develop G hirsutum vs. G barbadense heterotic groups of cotton, exploit them and develop broadbased populations of these heterotic groups.

(To be continued...)

Source: The ICAC Recorder, September 2014

COTTON ASSOCIATION OF INDIA
Established 1921

COTTON STATISTICS & NEWS

ADVERTISEMENT RATES

effective from April 2014

RATES PER INSERTION

	For CAI Members	For Non-Members
Full Page	Rs. 10,000	Rs. 11,000
Half Page	Rs. 6,000	Rs. 6,500

RATES FOR FOREIGN ADVERTISERS

Full Page	US $ 200
Half Page	US $ 125

Special Offer

For Members

Pay for eight insertions, get twelve (Full Page Rs.80,000/- and Half Page Rs. 48,000/- for twelve insertions)
Or
Pay for three insertions, get four (Full Page Rs. 30,000/- and Half Page Rs.18,000/- for four insertions)

For Non-Members

Pay for eight insertions, get twelve (Full Page Rs.88,000/- and Half Page Rs.52,000/- for twelve insertions)
Or
Pay for three insertions, get four (Full Page Rs. 33,000/- and Half Page Rs.19,500/- for four insertions)

Mechanical Data:

Full page print area: 172x250 mm (Non Bleed Ad)
210x297 mm (+ Bleed)

Half page print area : 172x125 mm (Non Bleed Ad)
148x210 mm (+ Bleed)

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

CAI Urges CCI To Push Sales

The Cotton Association of India (CAI) released its February estimate of the cotton crop for the season 2014-15. The CAI has placed the cotton crop for the season 2014-15 beginning on 1st October 2014 at 396.00 lakh bales of 170 kgs. each.

The projected Balance Sheet drawn by the CAI for the year 2014-15 estimates total cotton supply at 465.90 lakh bales while domestic consumption is estimated at 310.00 lakh bales thus leaving an available surplus of 155.90 lakh bales. A statement containing the state-wise estimates of the crop and Balance Sheet for the season 2014-15 with the corresponding data for the previous year is given below.

The Cotton Corporation of India (CCI) needs to start making sales aggressively as they still hold a substantial portion of cotton procured by them this season. If the entire quantity of cotton held by the CCI is to be sold during this season (i.e. by September 30th), around 15 lakh bales need to be sold by them every month. There is a strong risk of triggering support price operations in the next season also if too much of stock is carried too far into the next season.

CCI also needs to follow a uniform sales policy for all sectors.

CAI's Estimates of Cotton Crop as on 28th February 2015 (in lakh bales)

State	Production *		Arrivals as on 28.02.15
	2014-15	2013-14	
Punjab	13.00	15.00	11.10
Haryana	23.50	23.50	16.05
Upper Rajasthan	6.50	5.50	5.70
Lower Rajasthan	10.50	8.25	8.85
Total North Zone	**53.50**	**52.25**	**41.70**
Gujarat	119.00	129.25	66.25
Maharashtra	82.25	87.00	58.75
Madhya Pradesh	18.00	19.50	13.80
Total Central Zone	**219.25**	**235.75**	**138.80**
Telangana	54.00	78.00	47.30
Andhra Pradesh	24.00		20.90
Karnataka	32.00	29.00	20.55
Tamil Nadu	7.25	7.25	4.50
Total South Zone	**117.25**	**114.25**	**93.25**
Orissa	4.00	3.00	1.50
Others	2.00	2.00	1.00
Total	**396.00**	**407.25**	**276.25**

*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	396.00	407.25
Imports	11.00	11.75
Total Supply	**465.90**	**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	155.90	
Closing Stock		58.90

UPCOUNTRY SPOT RATES

(Rs./Qtl)

Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	23rd	24th	25th	26th	27th	28th
Standard Descriptions with Basic Grade & Staple in Millimetres based on Upper Half Mean Length [By law 66 (A) (a) (4)]							Spot Rate (Upcountry) 2014-15 Crop MARCH 2015					
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	8802 (31300)	8858 (31500)	8858 (31500)	8886 (31600)	9083 (32300)	
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	8942 (31800)	8998 (32000)	8998 (32000)	9026 (32100)	9223 (32800)	H
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	6299 (22400)	6327 (22500)	6383 (22700)	6383 (22700)	6383 (22700)	
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	7452 (26500)	7508 (26700)	7564 (26900)	7564 (26900)	7564 (26900)	O
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	7733 (27500)	7874 (28000)	7874 (28000)	7874 (28000)	7874 (28000)	
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	9055 (32200)	9111 (32400)	9167 (32600)	9195 (32700)	9223 (32800)	
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	7789 (27700)	7817 (27800)	7874 (28000)	7902 (28100)	7902 (28100)	L
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	7958 (28300)	8042 (28600)	8127 (28900)	8155 (29000)	8155 (29000)	
9	P/H/R	ICS-105	Fine	27mm	3.5.4.9	26	9167 (32600)	9223 (32800)	9280 (33000)	9308 (33100)	9336 (33200)	I
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	8070 (28700)	8099 (28800)	8155 (29000)	8183 (29100)	8183 (29100)	
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	8380 (29800)	8380 (29800)	8436 (30000)	8464 (30100)	8464 (30100)	
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	9280 (33000)	9392 (33400)	9448 (33600)	9476 (33700)	9505 (33800)	D
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	8605 (30600)	8661 (30800)	8717 (31000)	8773 (31200)	8773 (31200)	
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	8605 (30600)	8661 (30800)	8745 (31100)	8802 (31300)	8802 (31300)	A
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	8802 (31300)	8858 (31500)	8914 (31700)	8970 (31900)	8970 (31900)	
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	8745 (31100)	8802 (31300)	8886 (31600)	8942 (31800)	8942 (31800)	
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	9111 (32400)	9167 (32600)	9223 (32800)	9280 (33000)	9280 (33000)	Y
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	9448 (33600)	9448 (33600)	9561 (34000)	9617 (34200)	9617 (34200)	
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	9729 (34600)	9729 (34600)	9842 (35000)	9898 (35200)	9898 (35200)	
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	11529 (41000)	11529 (41000)	11670 (41500)	11810 (42000)	11810 (42000)	

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