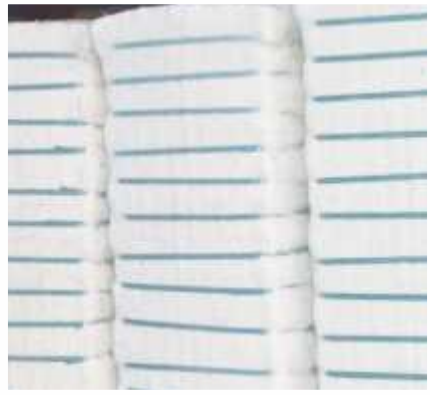
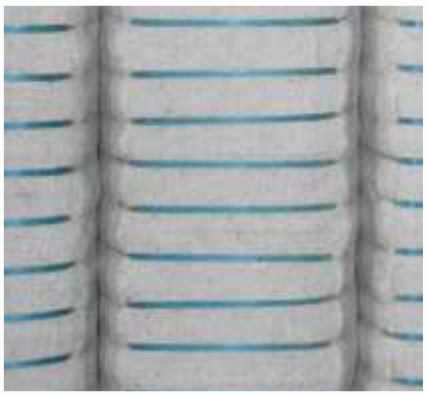










COTTON

HEDGING PRICE RISK

MCX
METAL & ENERGY
Trade with Trust

MCX INVESTOR PROTECTION FUND



The use of cotton for fabric is known to date to prehistoric times; fragments of cotton fabric dated from 5000 BC have been excavated in Mexico and the Indus Valley Civilization. The Greeks and the Arabs were not familiar with cotton until the Wars of Alexander the Great, as his contemporary Megasthenes told Seleucus I Nicator of "there being trees on which wool grows" in "Indica".

The Indus cotton industry was well developed and some methods used in cotton spinning and fabrication continued to be used until the industrialization of India. Between 2000 and 1000 BC cotton became widespread across much of India. For example, it has been found at the site of Hallus in Karnataka dating from around 1000 BC. India's cotton-processing sector gradually declined during British expansion in India and the establishment of colonial rule during the late 18th and early 19th centuries. Indian markets were increasingly forced to supply only raw cotton and were forced, by British-imposed law, to purchase manufactured textiles from Britain.

Source: Wikipedia

OVERVIEW

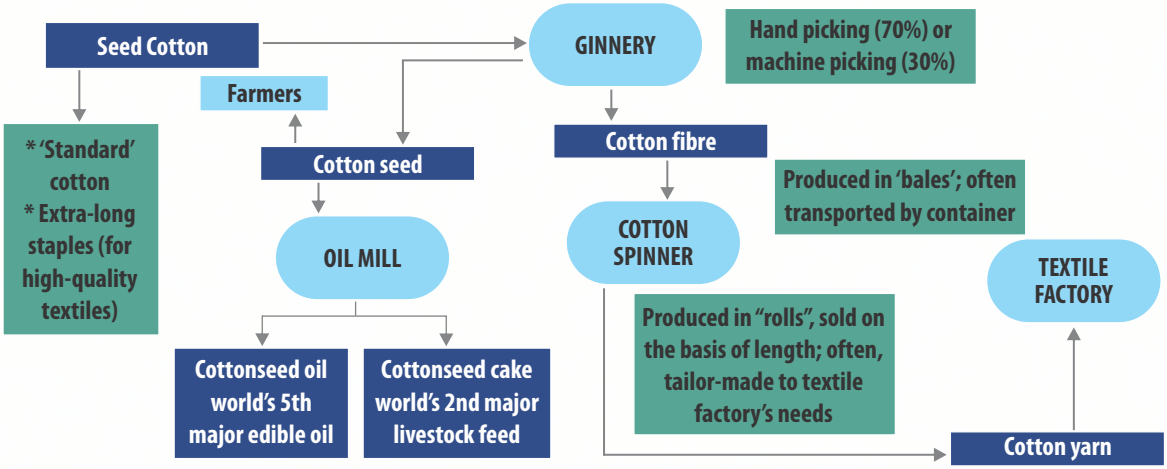
Cotton is essentially grown for its fibre, which is used the world-over to make textile. Cotton fibre is one of the most important textile fibres, accounting for around 35% of the world's total textile fibre used. Cotton's strength, absorbency, and capacity to be washed and dyed also makes it adaptable to a considerable variety of textile products. Cotton is used for thousands of things, including clothes, space suits and ingredients in the food we eat. Cotton seed is crushed to make cottonseed cake, which is used in livestock feed; and cottonseed oil which is the 5th major edible oil consumed in the world.

Cotton is classified according to the staple, grade, and character of each bale—staple refers to the fibre length; grade ranges from coarse to premium and is a function of colour, brightness and purity; and character refers to the fibre's strength and uniformity.

MAJOR STAKEHOLDERS

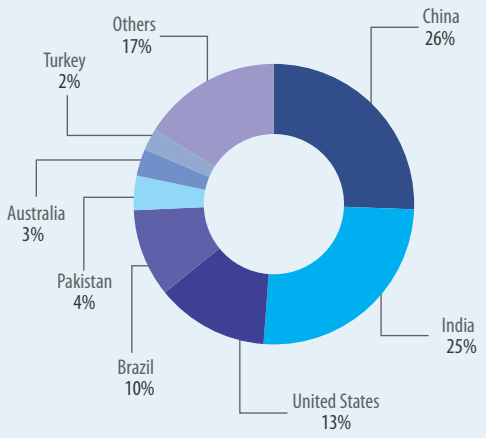
Farmers, cooperatives, government agencies, banks, ginning unit, yarn manufacturers, textiles unit, garments unit are the major stakeholders of the cotton industry.

THE COTTON VALUE CHAIN



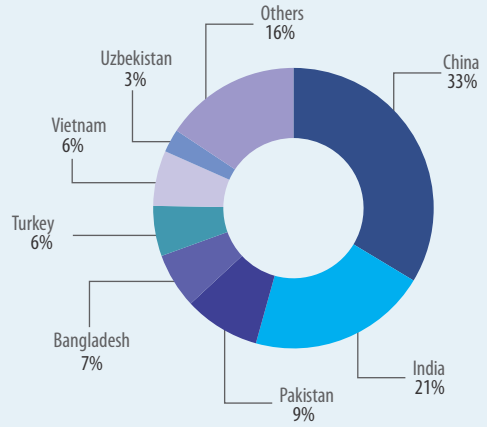
GLOBAL BALANCE SHEET

World's major producers (2020-21)



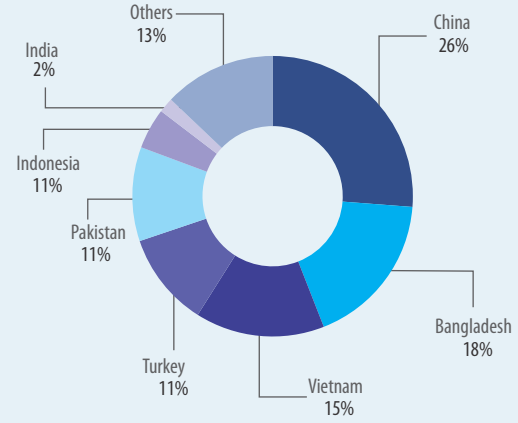
Source: USDA (U.S. Department of Agriculture)

World's major consumers (2020-21)



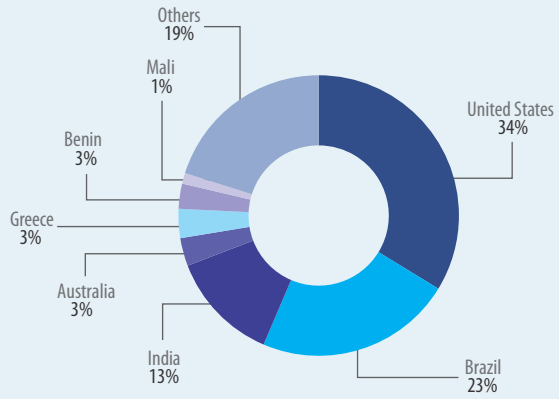
Source: USDA (U.S. Department of Agriculture)

World's major importers (2020-21)



Source: USDA (U.S. Department of Agriculture)

World's major exporters (2020-21)



Source: USDA (U.S. Department of Agriculture)

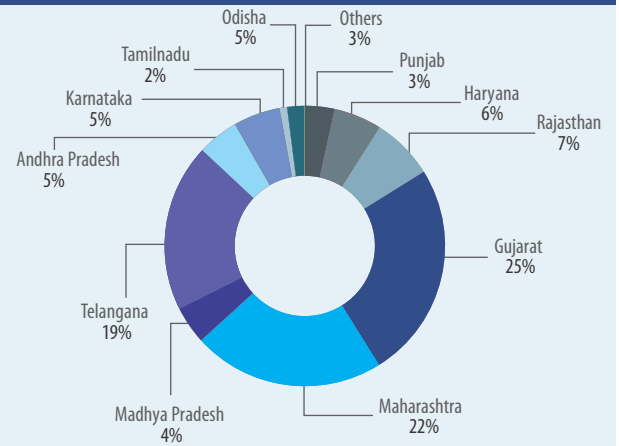
INDIA - BALANCE SHEET

(Quantity in lakh bales of 170kgs)

ITEM	2019-20	2020-21(P)*	2021-22(P)*
Supply			
Opening Stock	56.52	120.79	71.84
Crop size	365.00	352.48	340.62
Imports	15.50	11.03	18.00
Total Availability	437.02	484.30	430.46
Demand			
Mill Consumption	233.7	297.45	305.00
SSI Consumption	20.49	22.42	24.00
Non-Textile Consumption	15.00	15.00	16.00
Total Consumption	269.19	334.87	345.00
Exports	47.04	77.59	40.00
Total Disappearance	316.23	412.46	385.00
Closing Stock	120.79	71.84	45.46

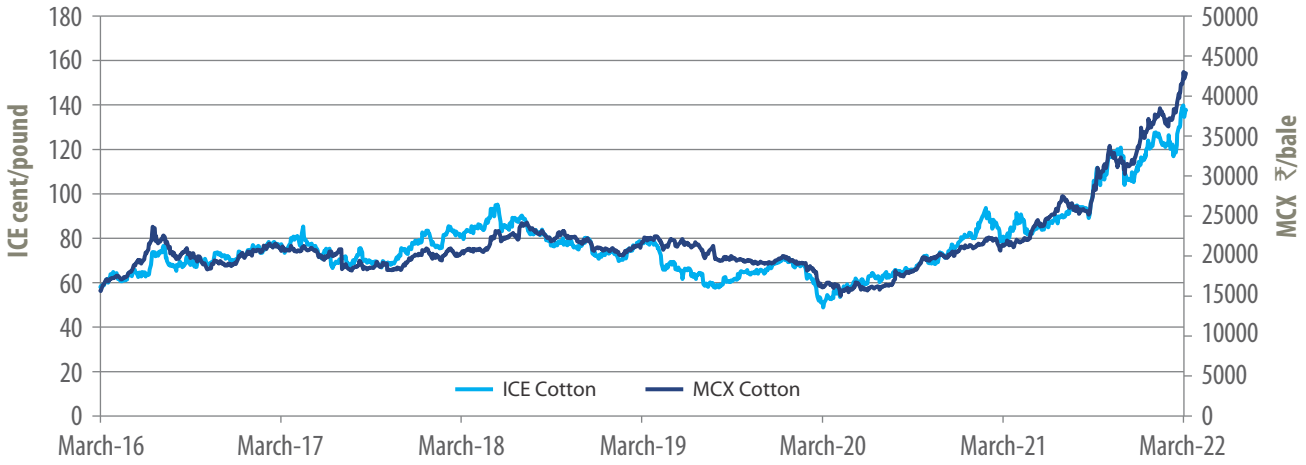
*Source: *As estimated by Committee on Cotton Production and Consumption (COCPC) in its meeting held on 22.03. 2022 | P: Provisional*

Major Indian producing states (2021-22 (Provisional)



*Source: *As estimated by Committee on Cotton Production and Consumption (COCPC) in its meeting held on 22.03. 2022 | P- Provisional*

Price Movement



PRICE RISK MANAGEMENT

Risk management techniques are of critical importance for participants such as textile companies, ginners, spinners and cotton stockists. Modern techniques and strategies, including market-based risk management financial instruments such as 'Cotton Futures', offered on the futures platform can improve efficiencies and consolidate competitiveness through price risk management. The importance of risk management cannot be overstated; an expert committee setup by the government found that commodity derivative exchanges are efficiently fulfilling their functions of price discovery and price risk management.

HEDGING MECHANISM

Hedging is the process of reducing or controlling risk. It involves taking equal and opposite positions in two different markets (such as physical and futures market), with the objective of reducing or limiting risks associated with price change. It is a two-step process, where a gain or loss in the physical position due to changes in price will be offset by changes in the value on the futures platform, thereby reducing or limiting risks associated with unpredictable changes in price. In the international arena, hedging in cotton futures takes place on a number of exchanges, the major ones being Inter Continental Exchange (ICE), Zhengzhou Commodity Exchange (ZCE), Brazilian Mercantile and Futures Exchange (BM&F).

IMPORTANCE OF HEDGING

Critical for stabilizing incomes of corporations and individuals, reducing risks may not always improve earnings, but failure to manage risk will have direct repercussion on the risk bearers long-term income. To gain the most from hedging, it is essential to identify and understand the objectives behind hedging. A good hedging practice, hence, encompasses efforts by companies to get a clear picture of their risk profile and benefit from hedging techniques.

FACTORS INFLUENCING THE MARKET

International factors

- India has emerged as a large exporter of quality cotton in recent years, and hence, world fundamentals influence prices greatly. World production, consumption, and ending stocks has its bearing on domestic prices.

Domestic factors

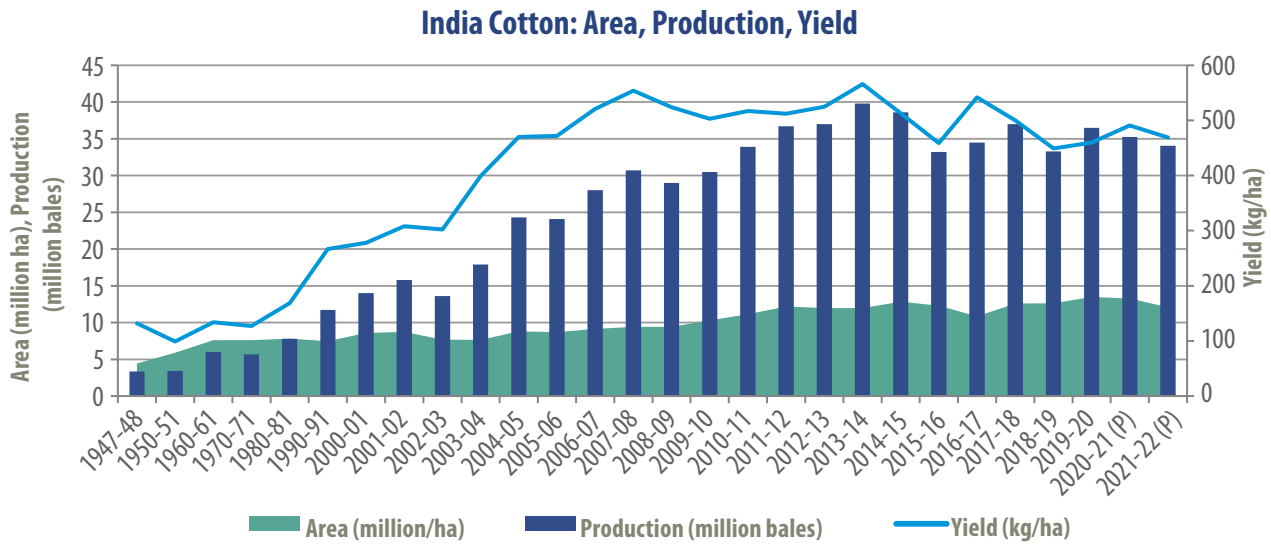
- **Crop related.** Acreage, monsoon, insect, pest attacks, and so on.
- **Carry Forward Stock**
- **Policy related.** Minimum support price, government policies towards import-export, and so forth.
- **Economy.** Well-being of final consumer, financial condition of textiles and related industries, and so on.

HEDGING STRATEGY-BUYERS

- Buyers can buy their requirements of the year in a futures contract by paying a margin of around 10% and lock their prices for the entire year.
- They can keep on procuring cotton in the physical market round the year and square off the corresponding position in futures.
- Thus, even if the cotton price goes up, they do not incur any loss, because the profit from futures market offsets their increased cost of procurement.
- Thus hedging enables buyers to lock-in the effective prices at which they trade.

HEDGING STRATEGY-SELLERS

- Sellers can sell their estimated produce in advance at futures market and lock their prices; if the price falls, they are not bothered, because they get profit from the futures market.
- Sellers have both options—either to deliver at futures market on contract maturity or to sell their produce in the local physical market and square off the corresponding position in the futures market. If the price falls, the loss in the physical market is compensated by profits in the futures market.
- When sellers deliver cotton at futures markets, their timely payment is guaranteed by the Exchange.
- The seller must conform to the quality standards specified by Exchange.

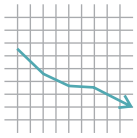


P: provisional
*Source: *As estimated by Committee on Cotton Production and Consumption (COCPC) in its meeting held on 22.03. 2022, P- Provisional*

HEDGING ILLUSTRATIONS

Example 1:

FALLING PRICES



Assume a ginner is holding stocks of 1000 bales of cotton (29mm) in October. By hedging, he can lock in the price for his stock in October itself and protect himself against the possibility of falling prices. Today's spot price of cotton is ₹25,000/bale and the price of December futures contract is ₹25,500 a bale.

The ginner sells (short) 40 lots of December futures contract in the month of October at ₹25,500/bale for a delivery in December. He pays margin money around 10% of the contract value to the exchange for entering a position in the futures market.

Assuming the prices fall by ₹1000/bale in the month of December. The ginner sold his stock in the physical market @ ₹24,000/bale and square off position in the futures market, by buying 40 lots of December future contract at ₹24,500 per bale.

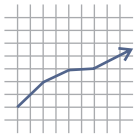
TIME	SPOT PRICE (₹/Bale)	FUTURES PRICE (₹/Bale of 170 kg)
October 202X	25,000	Sells 40 lot of Dec 202X @ ₹25,500
December 201X	24,000	Buys 40 lot of Dec 202X @ ₹24,500
Result	Loss of ₹1000 per bale	Gained ₹1000 per bale

RESULT

Thus, the ginner protected himself from falling prices in the spot market with an effective selling price of ₹25,000 per bale.

Example 2:

RISING PRICES



Suppose that today (in the month of October), an exporter receives an order to export 1000 bales of cotton in the month of December. He is planning to buy cotton from spot market and export it in December. Assuming, today's spot prices is ₹25,000/bale and December futures contract trading at 25,500 and he is worried that prices may rise in the month of December (spot). By hedging, he can lock in the purchase price in October itself (today) and protect himself from rise in prices in the spot market.

TIME	SPOT PRICE (₹/Bale)	FUTURES PRICE (₹/Bale of 170 kg)
October 202X	25,000	Buys 40 lot of Dec 202X @ ₹25,500
December 202X	26,000	Sells 40 lot of Dec 202X @ ₹26,500
Result	Loss of ₹1000 per bale	Gain of ₹1000 per bale

RESULT

Thus, the exporter protected himself from rising prices in spot market with an effective buying price of ₹25,000 per bale.

SALIENT CONTRACT SPECIFICATIONS OF COTTON FUTURES CONTRACTS

Symbol	COTTON	Description	COTTONMMMYY
Contract Listing	Contracts are available as per the Contract Launch Calendar		
Contract Start Day	1st day of contract launch month. If 1st day is a holiday then the following working day.		
Last Trading Day	Last calendar day of the contract month. If last calendar day is a holiday or Saturday then preceding working day		
Trading Period	Mondays through Fridays		
Trading Session	Monday to Friday: 9:00 am to 09:00 pm / 09:30 pm		
Trading Unit	25 bales		
Quotation/ Base Value	₹ Per bale (of 170 Kg)		
Maximum Order Size	1200 bales		
Tick size (minimum price movement)	₹10		
Price Quote	Ex-Warehouse Rajkot (Within 100 km radius) excluding all taxes, duties, levies, charges as applicable.		
Daily Price Limits	DPL shall have two slabs - Initial and Enhanced Slab. Once the initial slab limit of 4% is reached in any contract, then after a period of 15 minutes, this limit shall be increased further by enhanced slab of 2%, only in that contract. The trading shall be permitted during the 15 minutes period within the initial slab limit. After the DPL is enhanced, trades shall be permitted throughout the day within the enhanced total DPL of 6%.		
Initial Margin*	Minimum 8% or based on SPAN whichever is higher		
Extreme Loss Margin	Minimum 1%		
Additional and/or Special Margin	An additional margin (on both buy & sell side) and / or special margin (on either buy or sell side) at such percentage, as may be deemed fit, will be imposed by the Exchange / Regulator, as and when is necessary, in respect of all outstanding positions		
Maximum Allowable Open Position	For individual clients: 3,80,000 bales. For a member collectively for all clients: 38,00,000 bales or 15% of the market wide open position whichever is higher. Near Month Delivery: For individual clients: 95,000 bales. Near month member level position limit shall be equivalent to the one fourth of the overall member level position limit.		
Delivery Unit	25 bales (42.5 quintals or 12 candy approx.) +/- 7%		
Basic Delivery Centre	Rajkot (Gujarat)		
Additional Delivery Centre	1) Yavatmal, Jalna (Maharashtra) 2) Kadi, Mundra (Gujarat) 3) Adilabad (Telangana) The discounts (if any) for each of the additional delivery centres to the basic delivery center (Rajkot) will be announced by exchange before the launch of contract.		

SALIENT CONTRACT SPECIFICATIONS OF COTTON FUTURES CONTRACTS

Quality Specifications on Physical Inspection and HVI Mode	Goods should lie within the Tenderable Range according to defined quality specifications. Outlaying goods will not be accepted for delivery. Ginning Pattern: Roller Ginned Cotton. Saw Ginned Cotton will be accepted with discount. 1) **Basis Grade:** Basis Grade RD (Reflectance) value and +b (Yellowness): Basis 76 RD value (+2RD value/-3RD value) with premium/discount. Below 73 RD value reject and above 78 RD value no additional premium. +b up to 10.2 accept, +b above 10.2 reject. 2) **Staple 2.5% span length:** 29 mm with premium/discount. Below 28 mm reject and above 31.50 mm no additional premium. 3) **Micronaire (MIC):** 3.6 – 4.8 +/-0.1 with discount. Below 3.5 and above 4.9 reject. 4) **Tensile Strength:** 28 GPT Minimum, No premium or discount 5) **Trash:** Trash: 3.0% +1.5/-1.0% with premium and discount. More than 4.5% reject. 6) **Moisture:** Up to 8.5%. Acceptable up to 9.5% (average) at discount. The premiums/discounts with respect to quality specifications (in respect to Ginning Pattern, Grade, Staple, Micronaire, Trash and Moisture) will be announced by exchange before the launch of contract.
Physical Condition of Bales	All bales of the lot should be in good condition – should be free from oil/ ink stains penetrating the bale or damaged in any other way. It should have all the proper markings in form the unique PRN for identifying the individual bale as well as a total lot. The label should give details of variety, weight and crop year. The bale must be fully covered with hessian cloth/cotton fabric and no cotton shall be exposed. The bales must be securely strapped with iron bailing hoops / plastic straps.
Crop conditions	Only Current season Indian crop is deliverable.
Delivery Period Margin	Delivery period margins shall be higher of: **a.** 3% + 5 day 99% VaR of spot price volatility Or **b.** 25%
Due Date Rate (Final Settlement Price)**	For contracts where Final Settlement Price (FSP) is determined by polling, unless specifically approved otherwise, the FSP shall be arrived at by taking the simple average of the last polled spot prices of the last three trading days viz.,E0 (expiry day), E-1 and E-2. In the event the spot price for any one or both of E-1 and E-2 is not available; the simple average of the last polled spot price of E0, E-1, E-2 and E-3, whichever available, shall be taken as FSP. In case of non-availability of polled spot price on expiry day (E0) due to sudden closure of physical market under any emergency situations noticed at the basis centre, Exchange shall decide further course of action for determining FSP in consultation with SEBI.
Delivery Logic	Compulsory Delivery

** The Margin Period of Risk (MPOR) shall be in accordance with SEBI Circular no. SEBI/HO/CDMRD/DRMP/CIR/P/2020/15 dated January 27, 2020. For applicable minimum MPOR, refer latest circulars issued by MCXCCL from time to time. | For all the applicable margins, refer the latest circulars issued by the Exchange or Multi Commodity Exchange Clearing Corporation Limited (MCXCCL) from time to time. | ** As per SEBI directive SEBI/HO/CDMRD/DRMP/CIR/P/2016/90 dated Sep 21, 2016.*

 # Genuine hedgers having underlying exposure that exceed the prescribed OI limits given in the contract specifications can be allowed higher limits based on approvals.

***Note:** Please refer to the exchange circulars for latest contract specifications.*

REGULATORY BOOSTS FOR HEDGERS:

1. **Exemption from CTT:** Cotton has been put under list of commodities **exempted** from paying Commodities Transaction Tax
2. **Evening trading permitted:** The market is operational both during morning and evening, and thus participants can take part in price discovery when global markets are active.
3. **Limit on open position as against hedging:** This enables hedgers to take positions over and above prescribed position limits on approval by the exchange and thus can hedge to a great extent of their exposure in the physical market.
4. **Early Payin:** If a hedger makes an early pay-in of commodity, he is exempted from paying all applicable margins.

FACTS ON HEDGING

- Understand the risk profile and appetite while formulating clear hedging objectives.
- Hedging can shield the revenue stream, the profitability, and the balance sheet against adverse price movements.
- Hedging can maximize shareholder value.
- Common avoidable mistake is to book profits on the hedge while leaving the physical leg open to risk.
- Hedging provides differentiation to companies in a highly competitive environment.
- Hedging also significantly lowers distress costs in adverse circumstances confronting a company.
- A properly designed hedging strategy enables corporations to reduce risk. Hedging does not eliminate risk, it merely helps to transfer risk.
- To gain the most from hedging, it is very essential to identify and understand the objectives behind hedging and get a clear picture of their risk profile.



CONVERSIONS				
	1 Indian bale:	170 Kg	1 Indian Candy:	355.62 Kg of lint cotton
	100 Indian bales:	Approx. 48 Candy	1 US Bale (480 pound):	217.7 Kg



HEDGING QUOTES

"In order to mitigate the risks in its marketing activities related to commodity price fluctuations and potential losses, the Group has a policy, at any given time, of hedging substantially all of its marketing inventory not already contracted for sale at pre-determined prices through futures and swap commodity derivative contracts, either on commodities' exchanges or in the over the-counter market ."

(Glencore Annual Report)

"With increased volatility in cotton during the recent times, proper risk management has become extremely vital for the textile industry. So we have been actively hedging our cotton price exposure."

(Arvind Ltd., India)

IMPORTANT WEBSITES

www.cotcorp.gov.in | www.caionline.in | www.citiindia.com | www.icac.org | www.fcamin.nic.in | www.agriccop.nic.in
www.futuresource.com | www.dowjones.com | www.fas.usda.gov | www.bloomberg.com | www.reuters.com

A comprehensive Hedge Policy Document is available at:
https://www.mcxindia.com/docs/default-source/market-operations/trading-surveillance/reports/hedgepolicy.pdf?sfvrsn=2

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