

# TransGraph

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# *Monthly Sugar Price Outlook*

*MAY '2017*



# *FUNDAMENTAL SUMMARY*



# Domestic Sugar dynamics.. Unfolding at current Juncture

TransGraph

## Bearish

- Normal S-W Monsoon 2017 Forecast by IMD putting pressure on millers to offload stock to lock prevailing price
- Duty free 5 lakh ton import permission by GOI to complete before June 30<sup>th</sup>
- ~Close to 12% fall in NY raw sugar counter up to 15.6 cents/lb making Indian sugar import at parity @ INR 4000-4500/Ton
- Fear among millers for further cheap sugar Import in India (in case of disruptive s-w monsoon (June-Sept))
- 6.3% higher cane planting in current yr (harvest 17/18) vis a vis last yr on back of sufficient reservoir level and groundwater recharge ( 49.75 Lakh ha Vs 46.8 lakh ha).
- Lower demand on GOI scrapping subsidy on PDS ( normal 2.8 mln ton Govt procurement under PDS).
- From Uttar Pradesh, 3 Lakh ton higher sugar production than anticipated ~85 lakh ton in SS 16/17 (Total ~88 lakh ton)
- Active Central Govt Policy

## Bullish

- Falling Carry forward stock to lower **level @ 3.8 mln ton** at Oct 1<sup>st</sup> 2017 likely to keep market in upbeat mode. on thin carry in stock, firmness in price could extend up to next year (17/18).
- Critical Stock to consumption ratio (S/C) @15.6% and 18.3% in 16/17 and 17/18 respectively.
- Addition of weather risk premium for any deviation in S-W Monsoon in 2017 likely to keep market floated/ firm note. (on Early Al Nino Concern)

- Looking at above dynamics, currently market is **tilted more toward marginal bearish side on normal monsoon forecast by IMD, Central Govt being highly vigil and scrapping of subsidy under PDS**. Further, 12% sharp fall in international market recently too weighing on domestic price to trade weak on fear of further cheaper import moving forward.
- In totality above would be translating into price drifting lower amid higher offloading of stocks by miller to lock in prevailing prices.

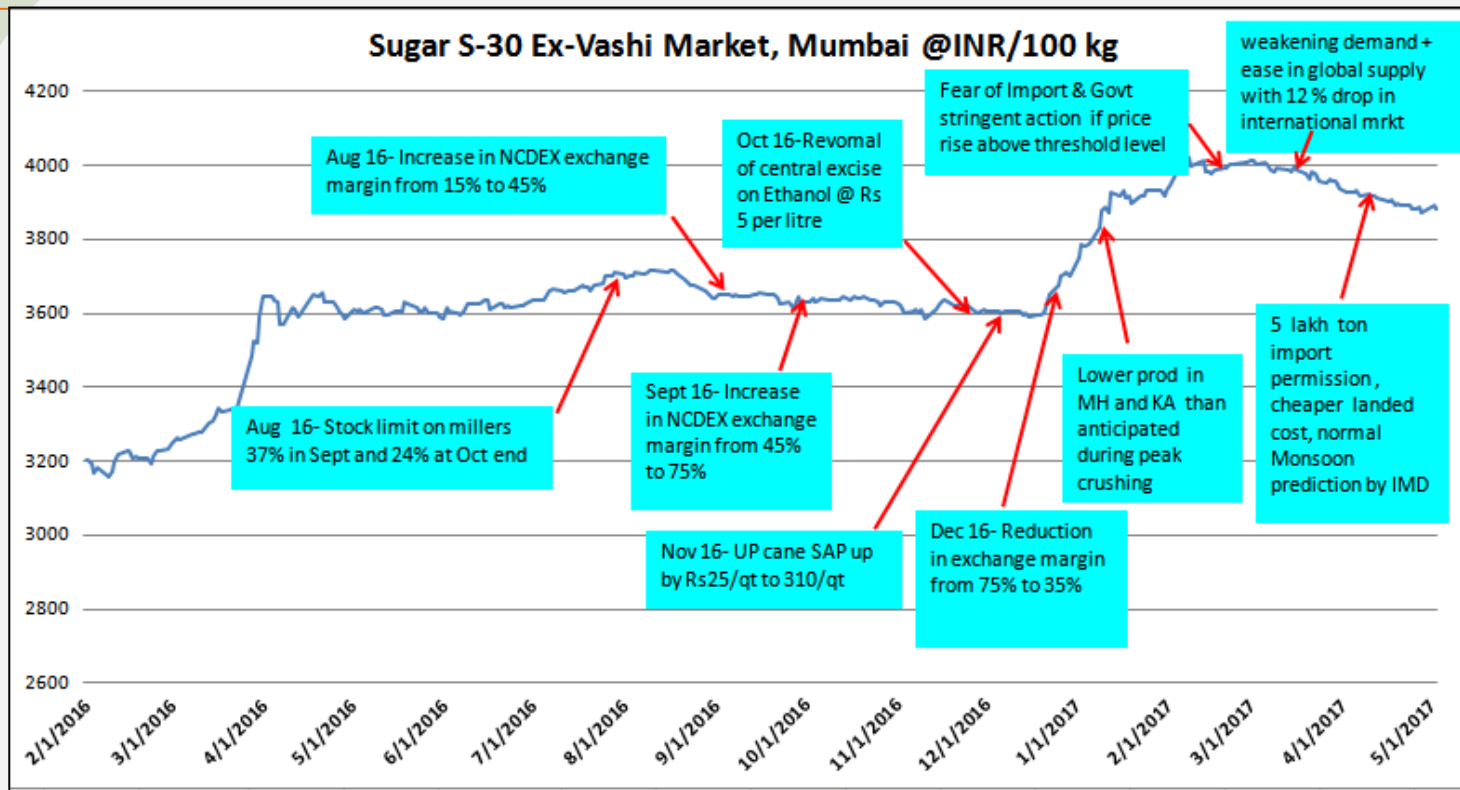
# *Rational behind latest sugar import (0.5 mln ton ) in India*

## **Govt allowed import of 5 lakh ton raw sugar on ground of**

- *It is done with major aim to benefit millers/refiners rather than consumer (as price were already below INR 40/kg)*
- *To support higher capacity utilization by sugar millers/refiners in deficit producing state (~ 50% in most of mills)*
- *To support sugar millers to earn higher margin in refining so as millers able to pay cane due, (primary GOI policy)*
- *Tactical swift move by GOI as just in time fall in international market making import cheaper with good parity (INR 4000-5000/Ton), favoring India with concluding crushing season in MH, KA, Tamilnadu and finally sending signal to millers to reign in domestic price in deficit year*
- *Quantity imported (0.5 mln ton) were again tactical in a sense that it is win win situation for millers & consumer. higher allowance of import would have sent domestic price spiraling lower making millers under stress with lower margin.*
- *This were also a precautionary step before monsoon on assumption that in case monsoon would had been disruptive and if at the same time international price had been higher, import in that case would have been costlier ~ INR40/kg leading to further rise in price (domestically).Hence with this timely import govt has defused any future possibility of situation going out of control. (if any)*
- *Govt wont get blame by opposition party not to act on time and allowing situation to go out of control (in case monsoon fails and price rise )*
- *Sending signal in market that current BJP Govt is ready to act on time if situation warranted.*
- *No hue and cry from consumer as long as price remain below Rs 40/kg (on lower quantum of import)*

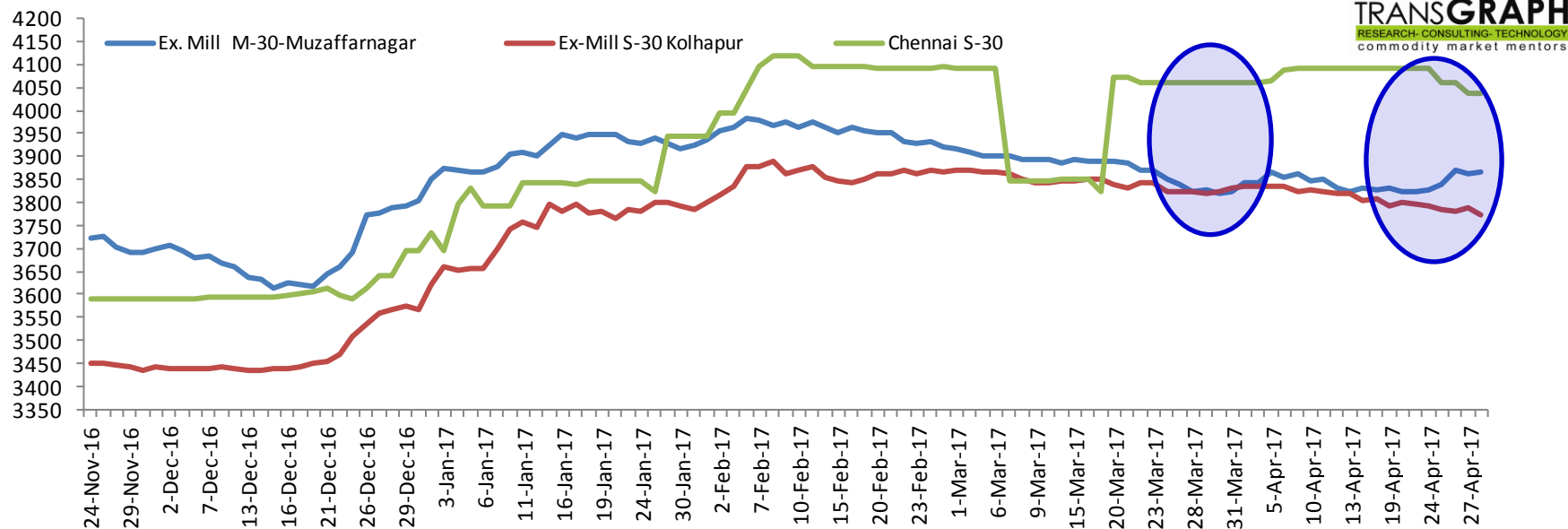
# Domestic Price Review

TransGraph



- ❖ Weakening domestic demand and ease in global supply with 12% drop in international market would continue pressurize domestic market to trade in defensive note. Note-- Price of Sugar S-30, Vashi Market, Mumbai (Ref taken) trades ~ INR 90-120/qt premium than S-30 Kolhapur on account of transportation cost.

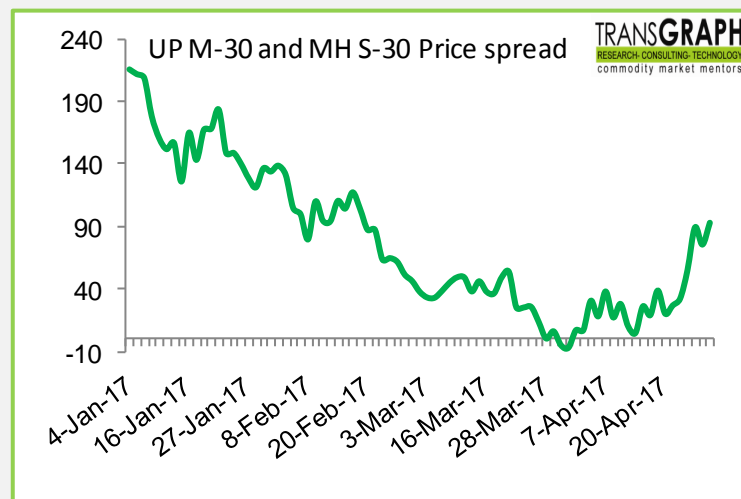
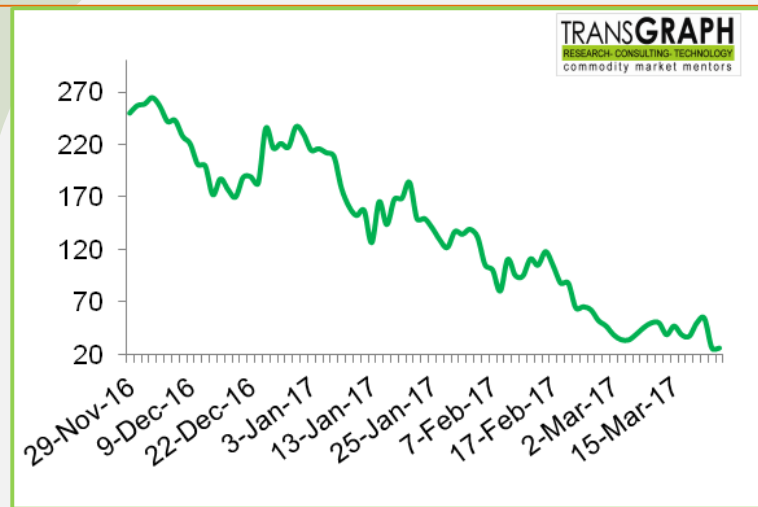
# Price review M-30 Muzzafarnagar, S-30 Kolhapur and S-30 Chennai



- ❖ Due to gradual rise in demand from South India on account of lower production and relative lesser availability of carry in stock, S-30 prices in Chennai is currently trading at premium (INR~230/qt) over M-30 Muzzafarnagar. Though spread has narrowed from 250/qt to 180/qt after marginal import; on persistent demand, it is unlikely to fall below INR 130-140/qt at immediate future.
- ❖ On the other hand, spread has widened from Rs 5 to 85/qt b/w S-30 Kolhapur & M-30 Muzzafarnagar on shifting of demand to Uttar Pradesh province from Maharashtra on competitive offer rate.

# Rising spread between S-30 Kolhapur than M-30 Muzzaffarnagar

TransGraph



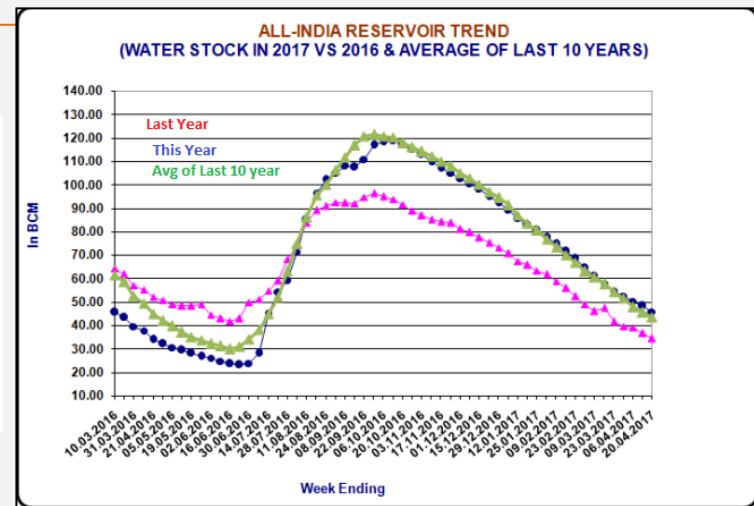
- ❖ From Dec 16 onwards spread between S-30 Kolhapur has gradually narrowed from Rs 300 to Rs -10 ( Mar 31<sup>th</sup> ) due to steep rise in price in Maharashtra relative to Uttar Pradesh.
- ❖ However from 1<sup>st</sup> week of April 17, after decision to import duty free sugar ~5 lakh ton , expectation of normal monsoon and shift in demand from Maharashtra to Uttar Pradesh has forced Maharashtra sugar mills to offload stocks more, resulting in widening of spread up to +80/qt. It is likely to persist in near future.



# Reservoir Status.. As on Apr 20th 2017

## For 91 Major Reservoir of India

Period	Storage as % of FRL	Storage as % of last year	Storage as % of 10 year's average level
Current Week	29	133	106
Last Week	31	132	106
The percentage to live capacity at FRL was 22% on 20/04/2016, 32% on 20/04/2015, 37% on 20/04/2014 and 28% on 20/04/2013.			
Source: CWC			

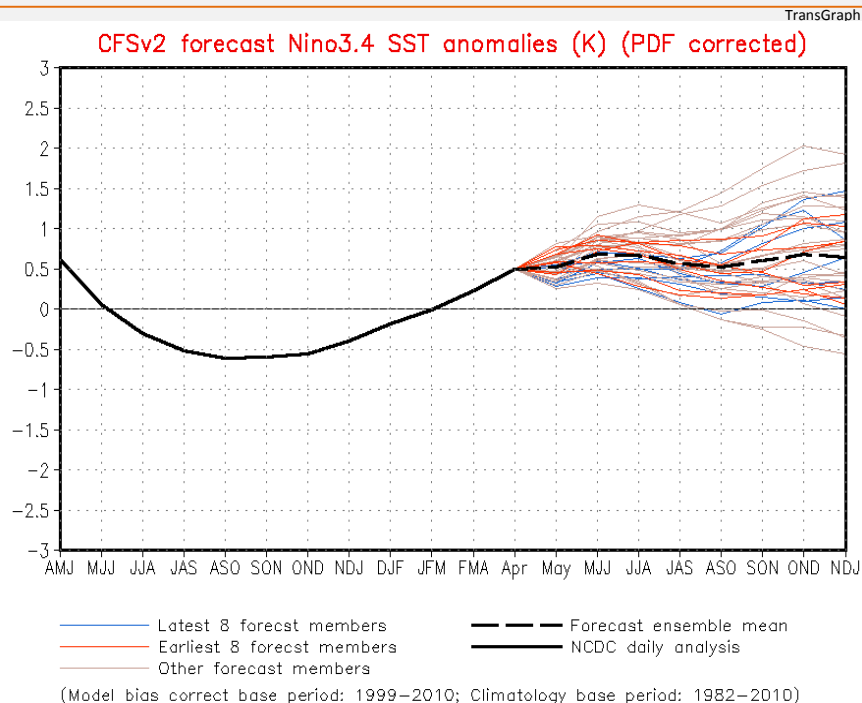
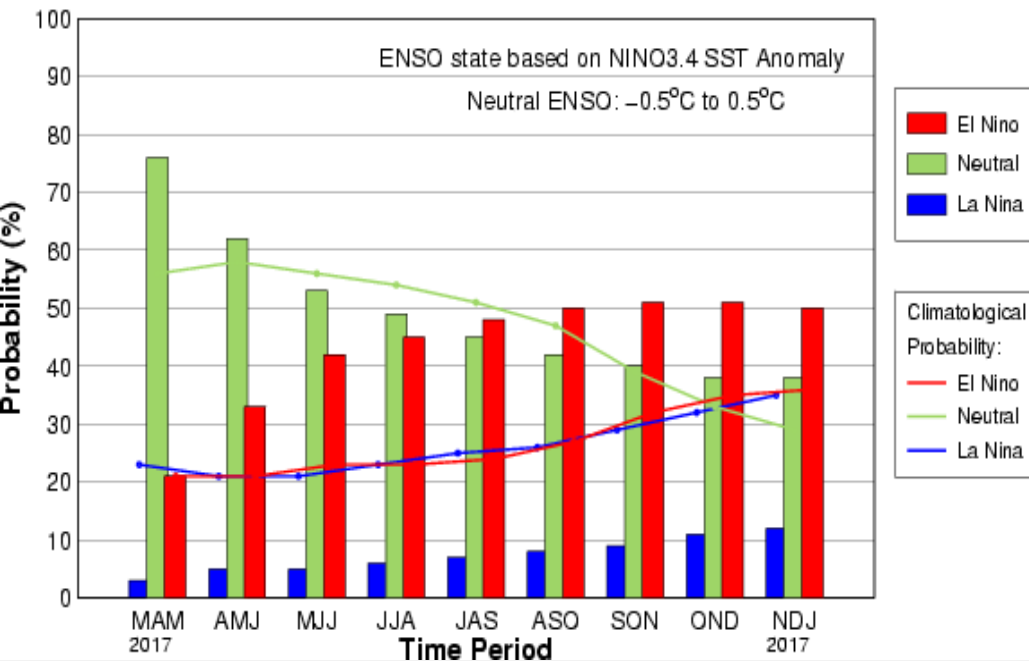


- ✓ Current Storage in terms of % of FRL is ~ **29%**, which is 7% higher than last year FRL % of **22%**. In comparison with 2015 storage , current year FRL is 3% lower.
- ✓ In Net terms, during April 2<sup>st</sup> fortnight, **water stock at 91 major reservoir decreased to 46.02 BCM** from previous week level of 48.42 BCM. This storage is higher than last year position of 34.51.70 BCM and 10 yr avg. of 43.50 BCM.
- ✓ With comfortable reservoir level compared to previous year and sufficient groundwater recharge from last year normal monsoon, ability to irrigate standing sugarcane in respective States shall support in improving yield and production in SS 17/18 starting from Oct 1<sup>st</sup> 2017.

Source: CWC, Full reservoir level (FRL) of 91 imp reservoir is 157.80 BCM ( billion cubic meter)

# CPC NOAA as on 17th April

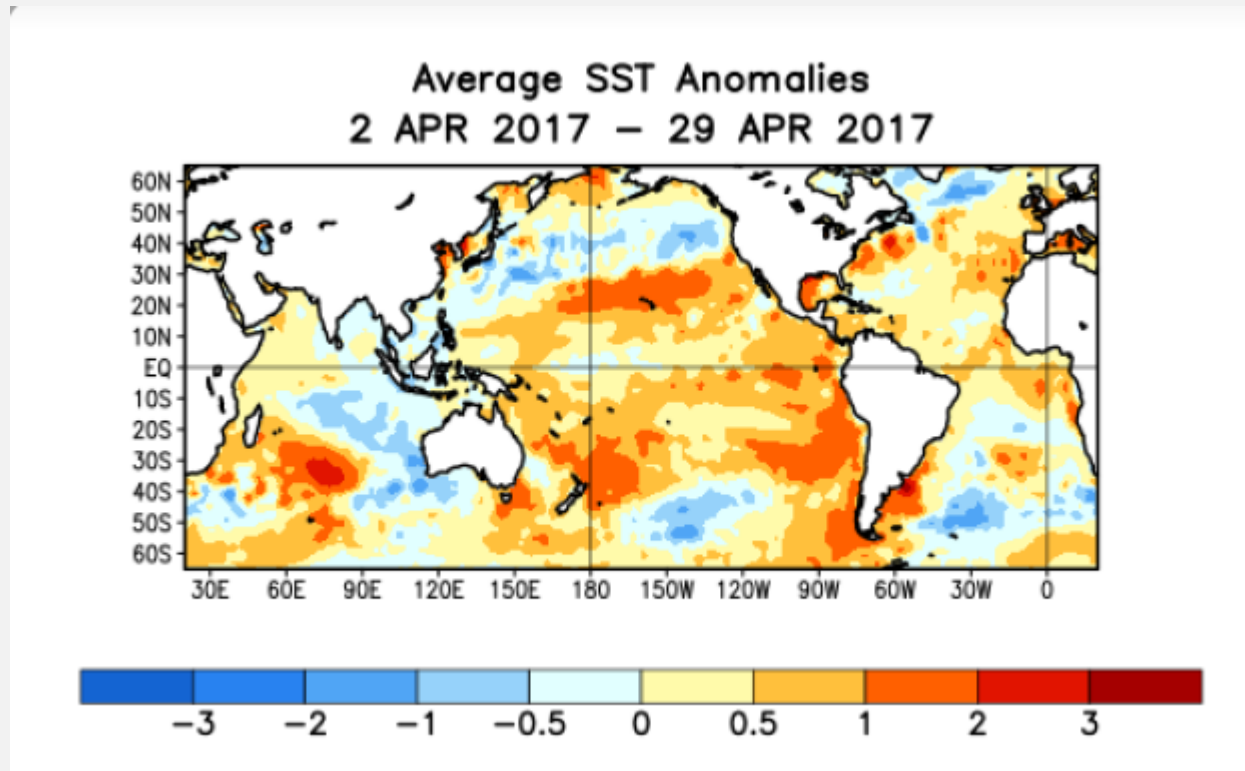
## Early-Apr CPC/IRI Official Probabilistic ENSO Forecast



- ENSO-neutral is favored through mid-2017, with a slight tilt toward El Niño (~50%) during the late summer and end of 2017.
- For forecast of Aug/Sept/Oct month there are ~50% Probability of El Niño building up, down 2% than previous forecast 15 days before. On such situation as far as SW Monsoon in India is concerned, there is 50% chances of disruption in rain during last 2 months of monsoon i.e Aug- Sept month. SW Monsoon( June 1- Sept 31<sup>st</sup> 2017).

# Global SST (Sea Surface Temp) Departure (degree C) during last 4 weeks

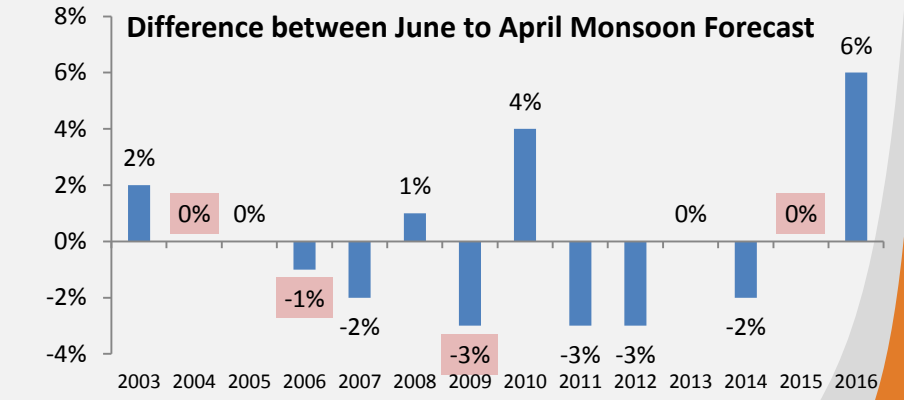
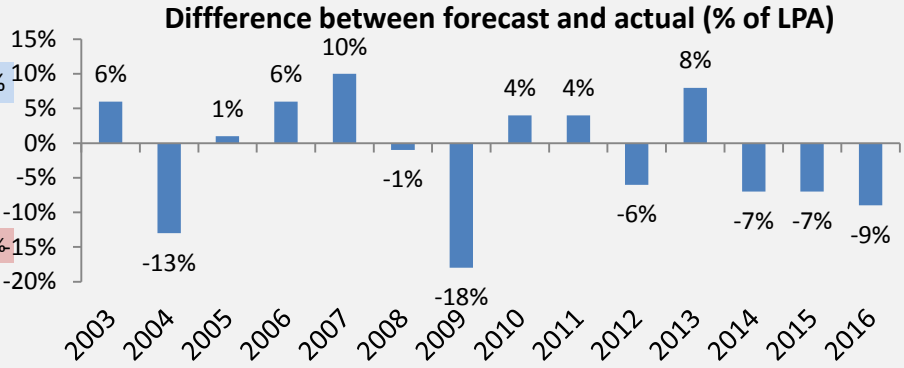
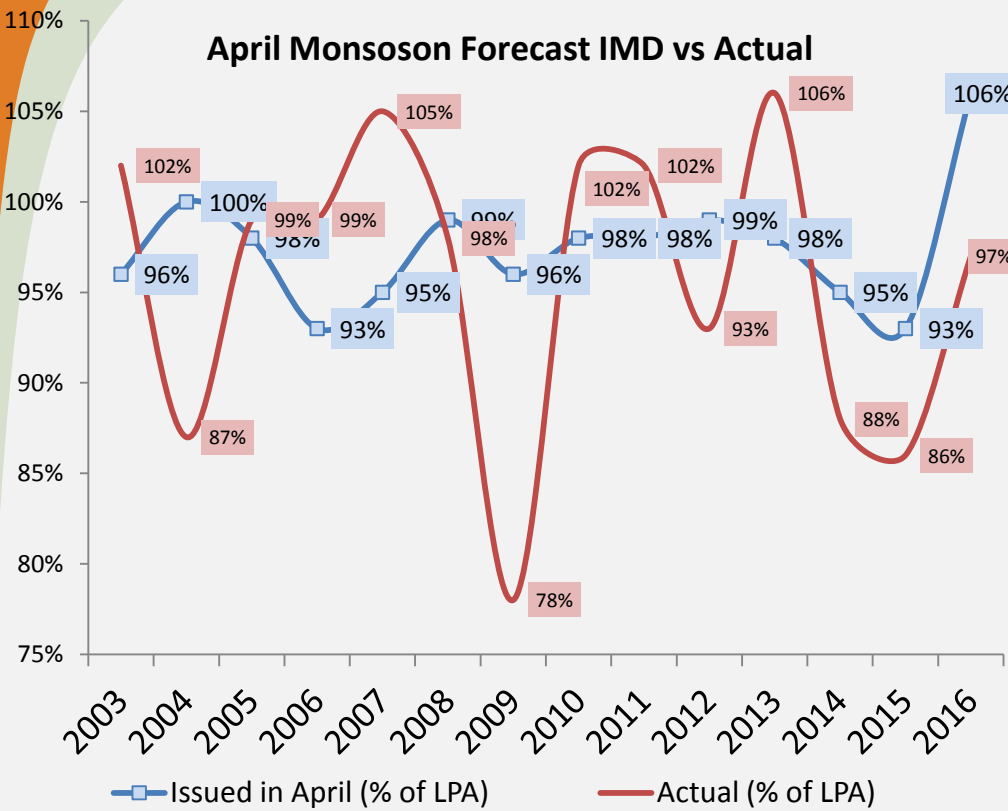
TransGraph



During the last four weeks, equatorial SSTs were above average in the eastern Pacific and Atlantic and near-average in the Indian and central Pacific Oceans

# Actual rainfalls deviated from forecast..IMD (Indian Meteorological Dept)

TransGraph



- With new weather model deployed , last two years the forecast has been in tune with the actual however the difference has been wide.
- Moving forward, IMD forecast of normal rainfall (96% of LPA) the actual can move towards deficit to below normal.

## What is in store for SS 2017/18 planting area ...

In Lakh Ha (TG estimate)	Expected planting area for 16/17 harvest	Expected planting area for 17/18 harvest ( new planting area higher than Ratoon)	% change on y-o-y basis
Sugar cane	46.80	49.75	6.3%

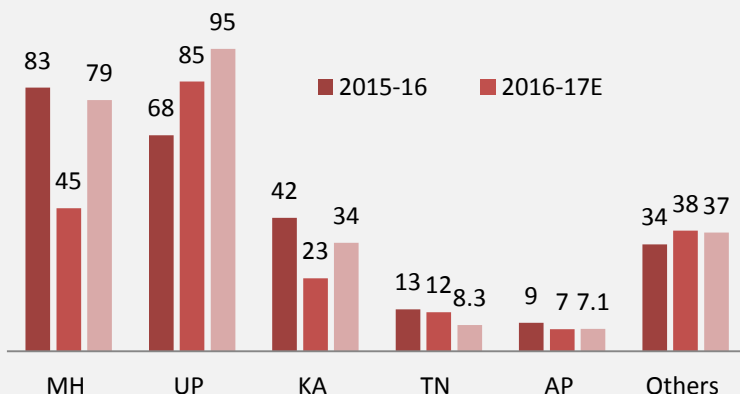
- ❖ Expected planting area for 17/18 harvest likely to be 6.3% higher at 49.75 than ~ 16/17 harvest of 46.80 Lakh Ha. Maharashtra net planting area were revised lower than previous on account of lesser planting than anticipated.
- ❖ In above, **fresh planting area would be higher than Ratoon crop**. Lower Ratoon crop during 17/18 harvest is due to lower fresh planting reported in drought affected 15/16 sowing season.
- ❖ **However amid worst drought seen in southern state Tamilnadu, Area under cane likely to drop in coming season.**

# Anticipations on Sugar Production and recovery rates- Major States

TransGraph

STATES	Sugar Production (Lakh ton)		
	2015-16	2016-17E	2017-18P
MH	83	45	79.2
UP	68	88	95.3
KA	42	23	34.2
TN	13	10.1	8.3
AP	9	7	7.1
Others	34	36	37.5
<b>Total India</b>	<b>249</b>	<b>20.9</b>	<b>26.1</b>

**Sugar Production (lakh Ton)**

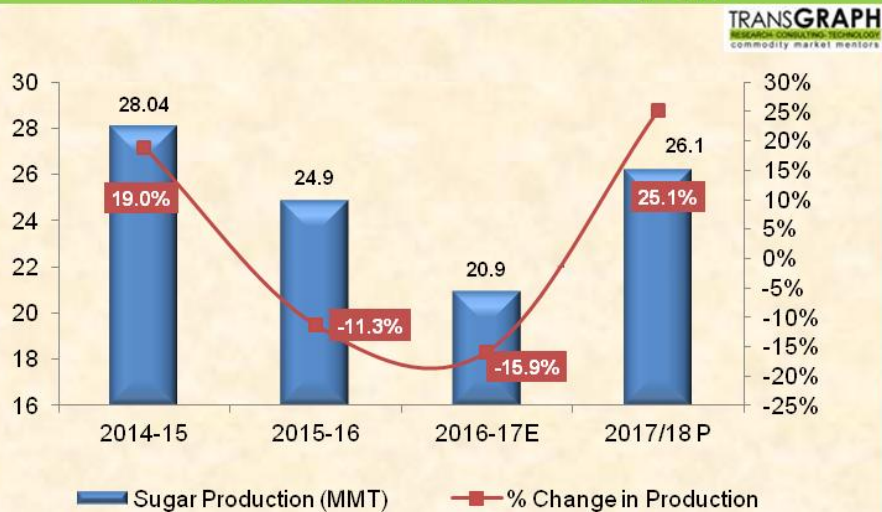


- ❖ For SS 16/17, Sugar production is estimated 209 lakh ton ( 20.9 mln ton) on relative higher seed requirement for planting purpose in drought affected Maharashtra and Karnataka provinces.
- ❖ for SS 17/18 Sugar production projected (revised downward) at 261 lakh ton (26.1 mln ton) on account of lesser cane planting in Maharashtra than anticipated despite better monsoon rain, groundwater recharge and improvement in cane planting acreage and Yield in Uttar Pradesh.

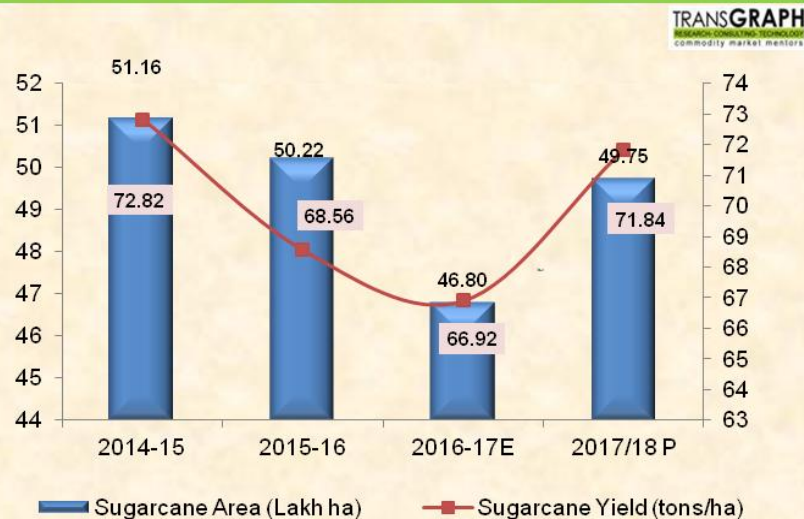
# Indian sugar Production and Productivity

TransGraph

## INDIAN SUGAR PRODUCTION



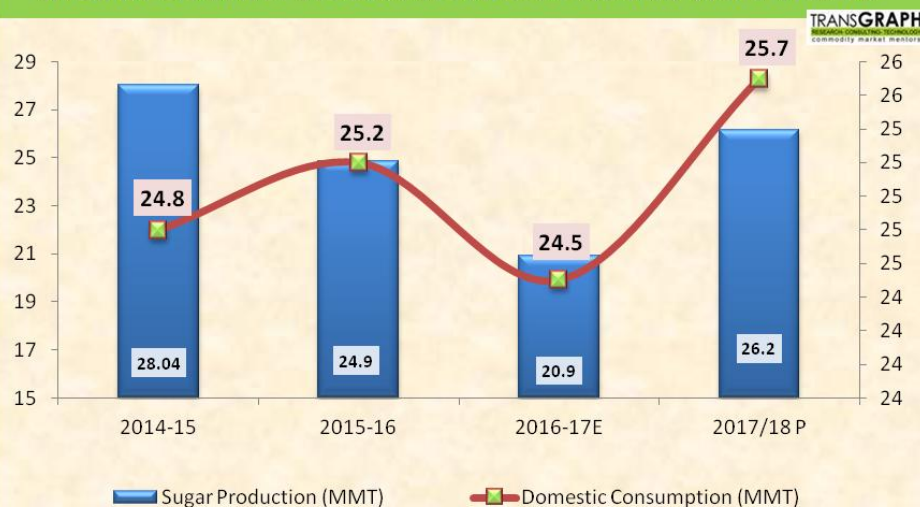
## INDIAN SUGARCANE AREA/PRODUCTIVITY



- ❖ As per Latest TG estimate, SS16/17 Sugar Production expected to be ~ 20.9 mln ton (lower by 15.9%) than ~25 mln ton in SS 15/16.
- ❖ For next SS 17/18 season, production projected ~25% higher to 26.1 mln ton on anticipated increase in planting acreage, increase in yield, expected normal monsoon.(upcoming 2017 Monsoon taken as normal)
- ❖ In terms of Productivity, next year it is expected to improve by 4.92 ton/ha to 71.84 ton/ha. In terms of planting, area likely to increase by 2.95 lakh ha to 49.75 lakh ha in SS 17/18.

# Sugar domestic consumption trend....

## INDIAN SUGAR PRODUCTION & CONSUMPTION TREND



- ❖ Demand destruction noted due to hangover impact of demonetization resulted in 7 lakh ton lower off take from millers.

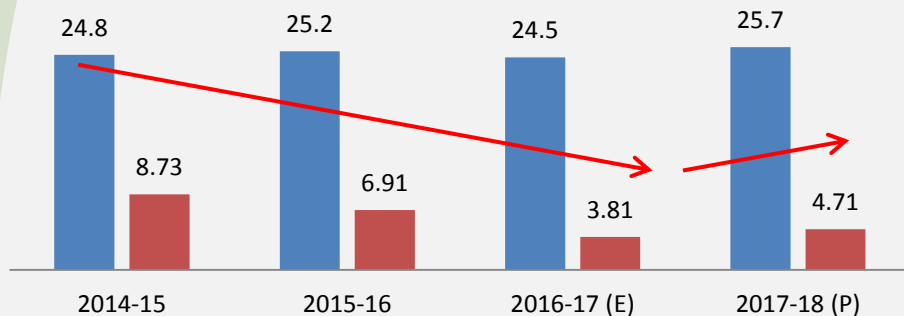
- ❖ Consumption requirement for 16/17 and 17/18 is to hover around 24.5 mln ton and 25.7 mln ton respectively.
- ❖ Recent allowance of subsidy of 3 lakh ton for poorest of poor (only 10% of total subsidy) by GOI likely to have nominal impact in overall demand.
- ❖ Out of 2.8 mln ton Sugar procurement under PDS for BPL population, minimum 0.5 mln ton lower off take could be anticipated. (with assumption that 2.3 mln ton state Govt buys from own coffers).
- ❖ Lower consumption in poor states as consumers need to buy sugar in open market @ 40-41/kg instead of 13.5/kg received earlier under PDS.



# Critically low ending stock moving forward.....in 17/18

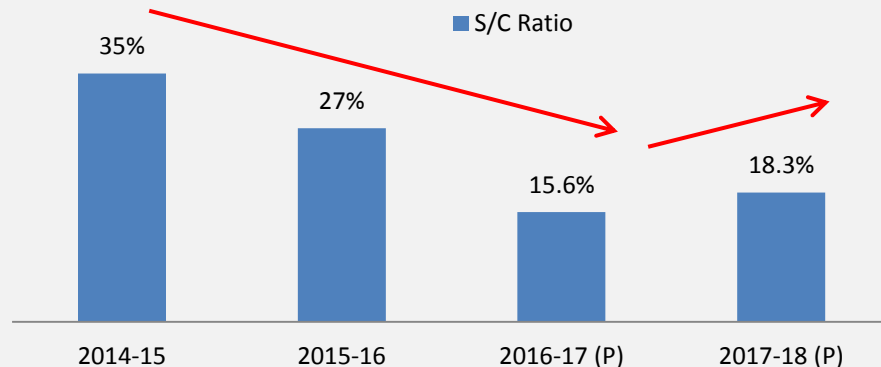
**Ending stock approaching at critical low level  
( in Mln Ton)**

■ Sugar Consumption ■ Ending Stock



**Falling Stock to Consumption (S/C) Ratio**

■ S/C Ratio



- ❖ Ending stock at end of 16/17 season ( i.e 1<sup>st</sup> Oct 2017) expected to be 3.81 mln ton which is critically close to ~ 1.5 monthly consumption requirement (15.3% Stock to consumption ratio). Any sharp deviation in normal S-W monsoon during 2017 season could put country at very tight spot in terms of available supply despite recent import of 0.5 mln ton.
- ❖ Ending stock for 17/18 season ( i.e 1<sup>st</sup> Oct of 2018) expected to be 4.71 mln ton, equivalent to ~18.3% of S/C ratio . This shall continue to put domestic sugar price on firm note in 17/18 holding ground moderately. Next year monsoon and cane planting area will be key to dictate next price action moving forward.

# Indian Sugar Balance Sheet

TransGraph

Attributes ( Oct- Sept)	2014-15	2015-16	2016-17E	2017-18P
Sugarcane Area (Lakh ha)	51.16	50.22	46.8	49.75
Sugarcane Yield (tons/ha)	72.82	68.56	66.90	71.85
Cane production (Lakh Ton)	3725	3443	3131	3574
Beginning Stocks (MMT)	6.9	8.73	6.91	3.81
Sugar Production (MMT)	28.04	24.9	20.9	26.1
Imports (MMT)	0	0	0.5	0.5
Total Supply (MMT)	34.94	33.6	28.31	30.41
Exports (MMT)	1.41	1.5	0	0
Domestic Consumption (MMT)	24.8	25.2	24.5	25.7
Total Demand (MMT)	26.21	26.7	24.5	25.7
Ending Stocks (MMT)	8.73	6.91	3.81	4.71
S/C ratio	35%	27%	15.6%	18.3%

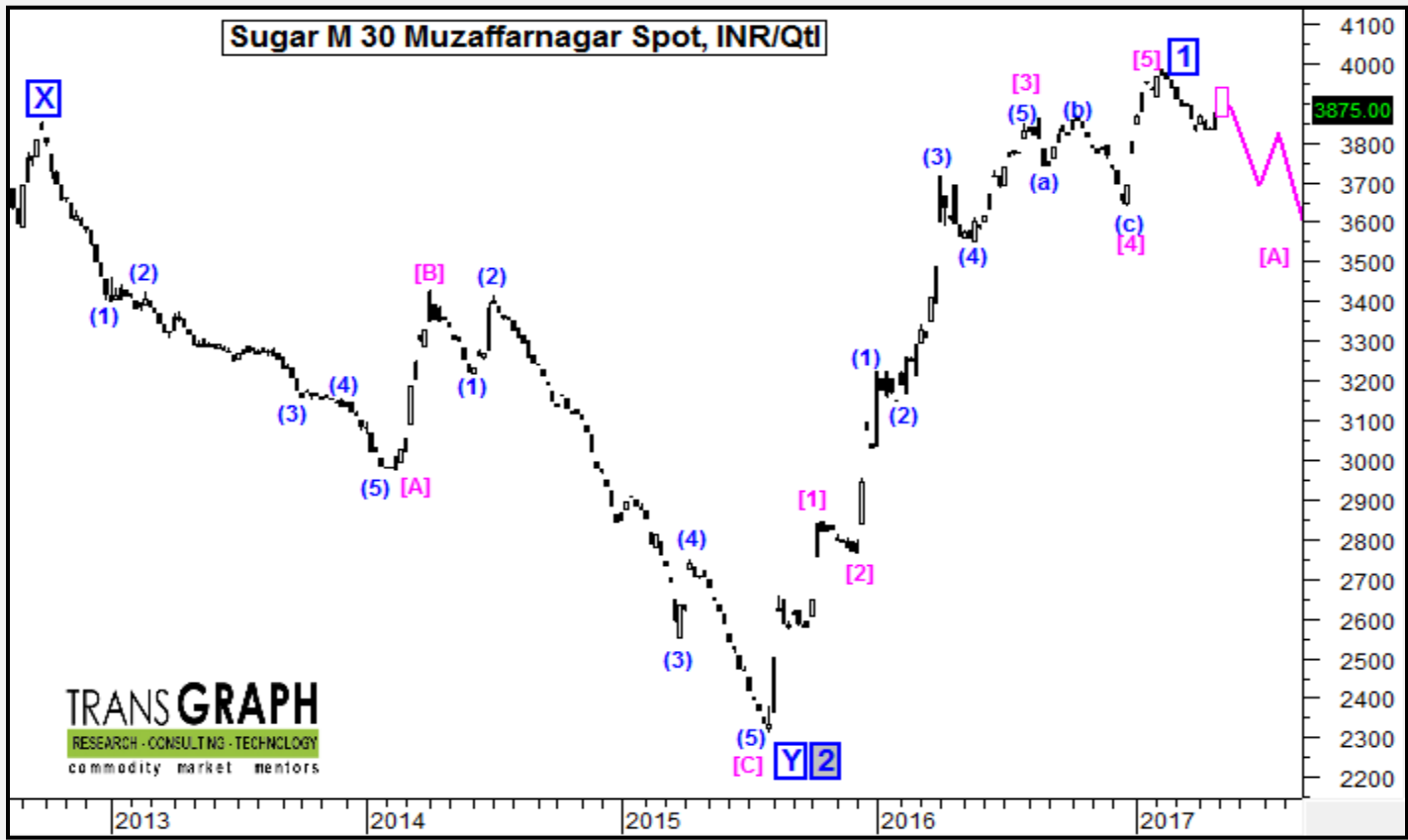
- ❖ For 16/17 Sugar production is estimated to hover ~20.9 mln ton with ending stock of 3.81 mln ton.
- ❖ However critically low S/C ratio @15.6%, may prompt domestic price to relatively remain firm (gradual marginal weakness only).
- ❖ In 17/18, ease in sugar supply expected with 5.2 mln ton higher prod @ 26.1 mln ton if monsoon supports crop.

# *TECHNICAL ANALYSIS-DOMESTIC*



# M-30 Muzaffarnagar Spot... Elliott Wave Analysis

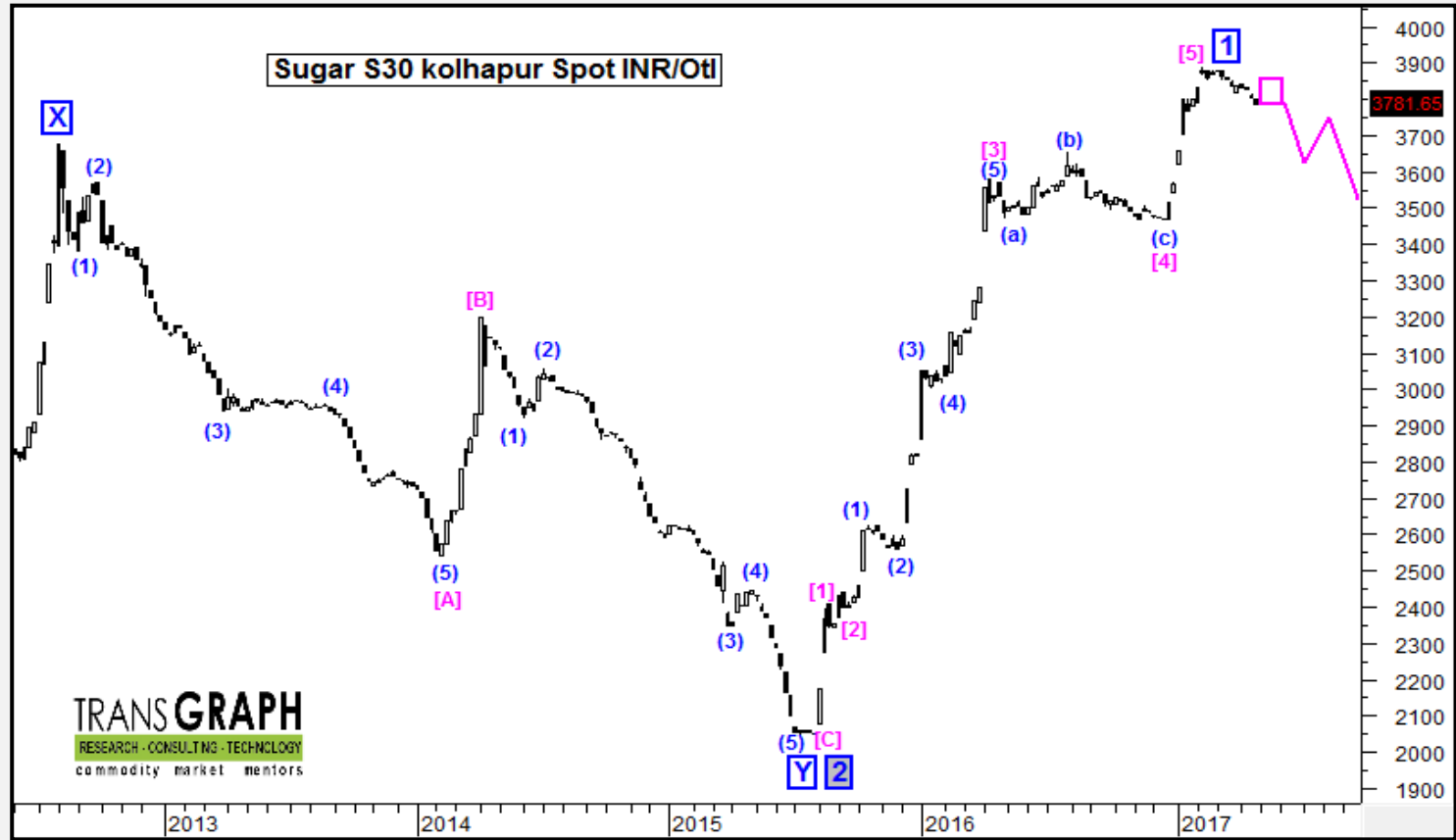
TransGraph



- **Sugar M Muzaffarnagar Spot** prices are trading positive after placing low of INR 2310 in Jul'15. According to preferred Elliott Wave Count, prices are likely place the primary top around INR 4000 and turn negative towards INR 3650 in the coming 2-3 months.

# S-30 Kolhapur Spot ... Elliott Wave Analysis

TransGraph



- **Sugar S Kolhapur Spot** prices have completed primary wave “1” at INR 3900 levels and turning negative as primary wave “2”, within that prices likely to stay below INR 3900 and trade lower towards INR 3550 in the coming 2-3 months.

# *Global Sugar SnD Dynamics*



## Bearish

- Anticipated 47-48% cane diversion for sugar in Brazil in 17/18 similar to 16/17 season. (~ 52-53% cane for Ethanol)
- Projected Brazil Sugar Production ~ 39 mln ton for 17/18 on good cane planting and crushing prospects on back of supportive weather.
- 25% higher Indian sugar production projected in 17/18 @ 26.1 mln ton than 16/17 (20.9 mln ton).
- 2.3 mln ton higher EU sugar beet production (+13%) projected in 17/18 @ 18.8 mln ton on higher planting prospects
- ~1.2 mln ton each higher production projection from Thailand & China in 17/18.
- EU sugar to compete in international export market after abolition of current quota regime Post Sept 2017.
- 17/18 global sugar surplus anticipated +2.6 mln ton than deficit of -5.8 mln ton in 16/17.

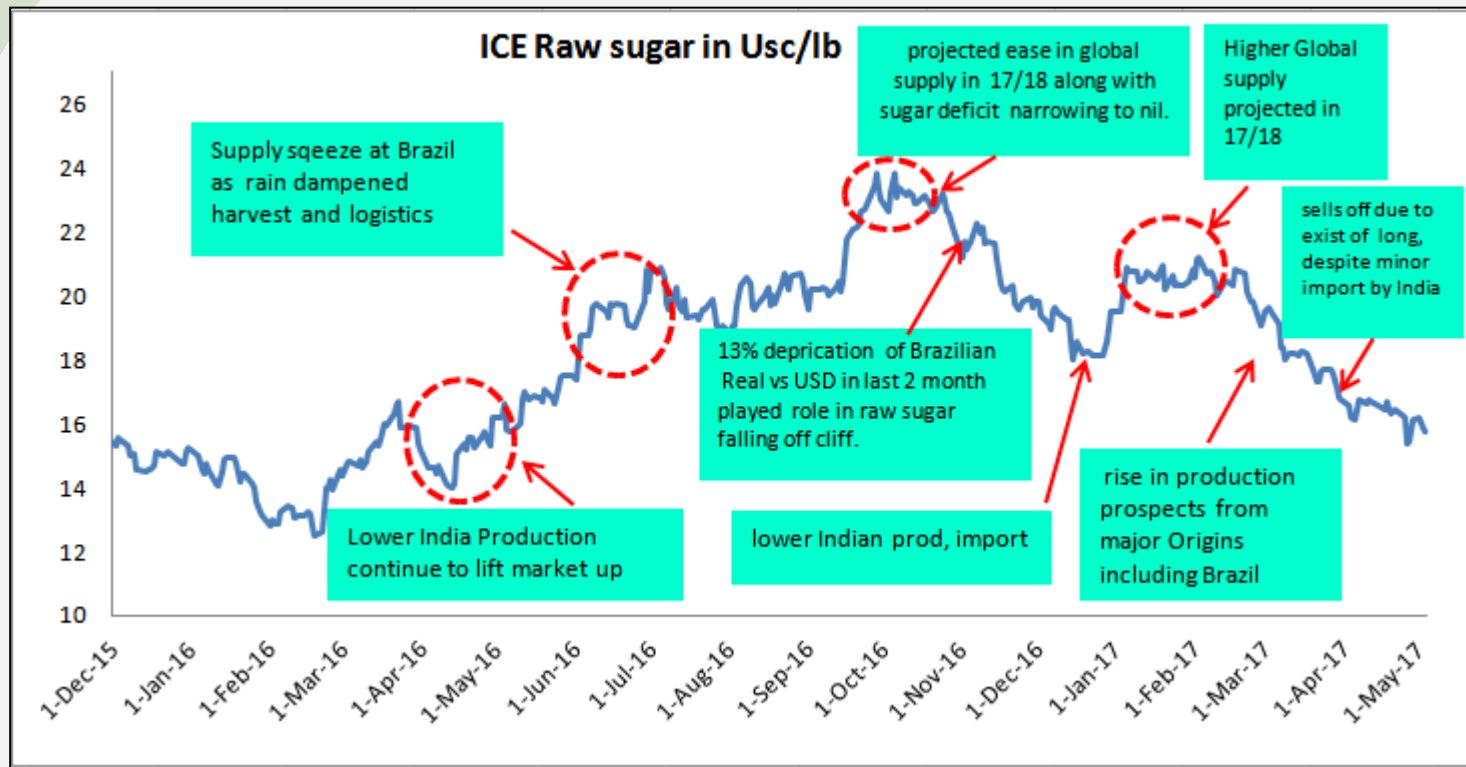
## Bullish

- Falling Global stock to consumption ratio (S/C) to critical level of 15.2% and 15.3% in 16/17 and 17/18 respectively.
- Falling global carry forward stock to lower level ~ 25.81 mln ton in 16/17, 27.01 mln ton in 17/18.
- In event of crude oil  $\geq$  \$70/bbl, likely higher diversion of cane towards ethanol on higher parity in Brazil resulting in lesser sugar production than anticipated < 39 mln ton ( current crude oil ~ \$45/bbl)
- Appreciation of Brazilian real on account of weakening USD in near future
- Building up of weather risk premium in Northern Hemisphere i.e in India/Thailand on Al Nino concern
- Possibility of further duty free sugar import in India wide open in event of disruptive monsoon in 2017, 2018 and thin inventory.

- Weighing current dynamics at play, market is on even balance with expected stable to sideways movement in near future. Any weather related concern round the corner could drift market up and vice versa. However good cane crushing from 17/18 harvest from Brazil likely to limit aggressive upside gain and keep raw sugar counter below 18.5 cents/lb in near future

# ICE Raw Sugar Price Review

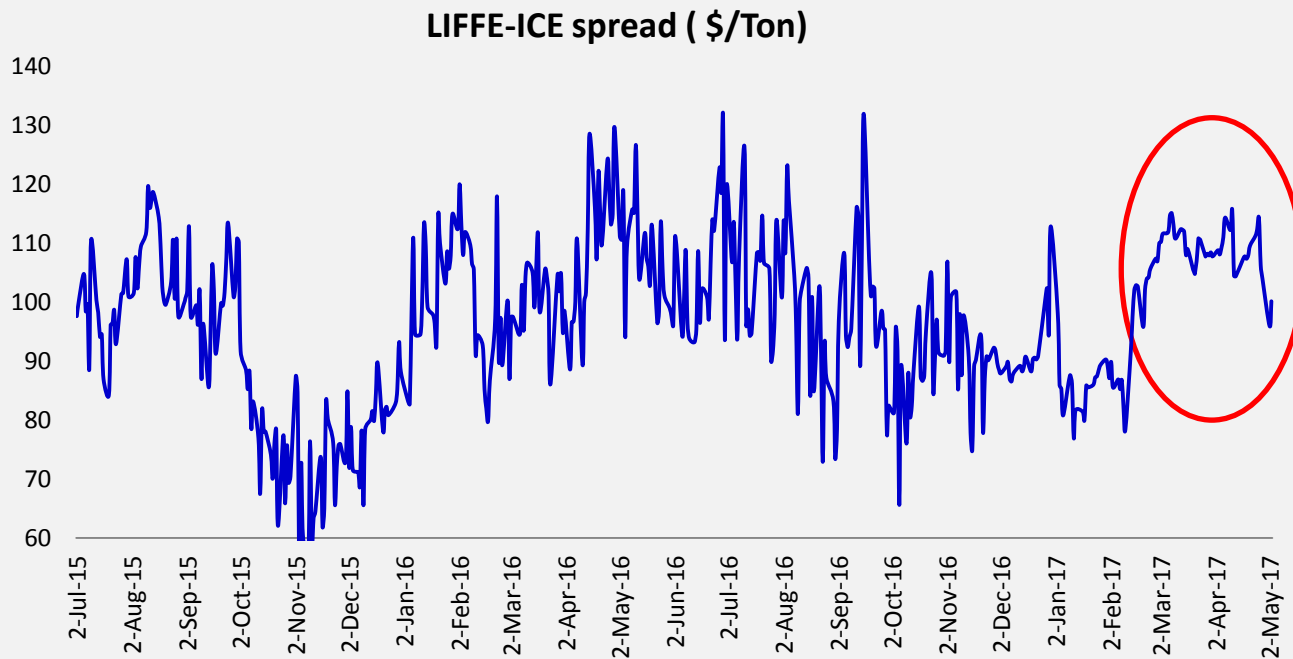
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- ❖ Raw sugar prices continue to trade weak breaching 16 cents/lb on anticipated higher global supply in SS 17/18.

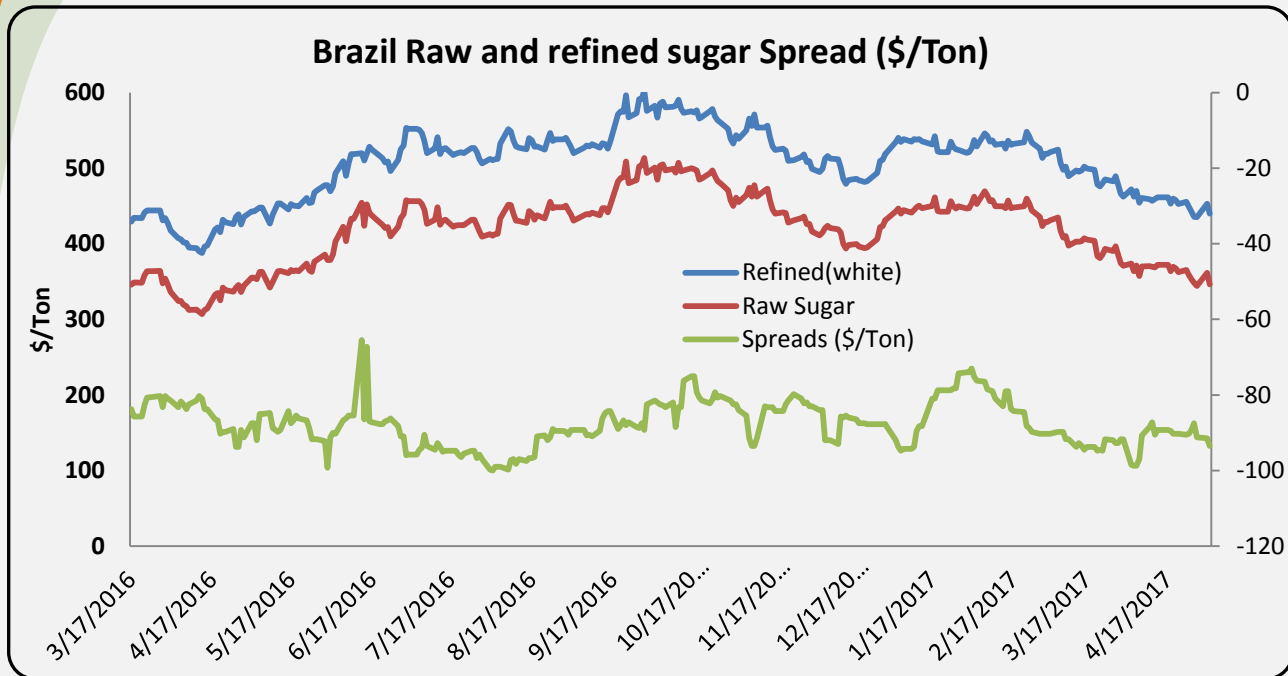


# London white sugar (No#5) & NY raw sugar (No#11) Spread



White sugar premium decreased from ~ \$105/Ton to \$90/Ton during last week of April 17 on anticipated higher demand for raw sugar than refined.

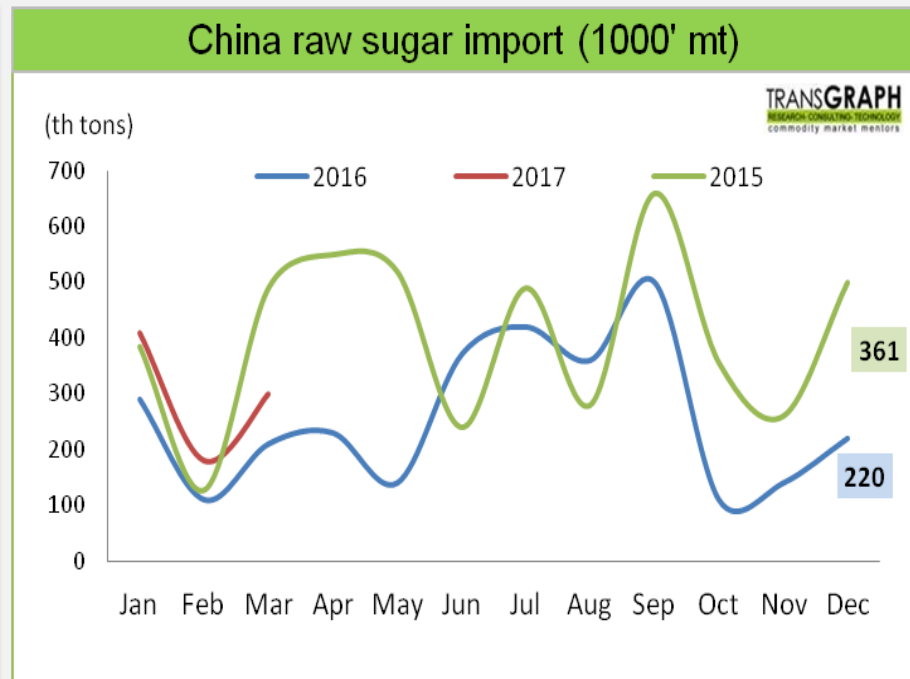
# Brazil FOB Raw & Refined sugar Spread



In last 2 month Brazil FOB Raw & refined sugar prices moved in tandem with spread in band of 90-100 \$/Ton. In next quarter, spread likely to remain in band of \$80-90/ton with unhindered higher export of raw sugar than refined from Brazil for SS 17/18 starting from Apr 2017 onwards.

# China Raw Sugar import in last 5 years.. (in 1000 MT)

Month	2012	2013	2014	2015	2016	2017
Jan	140	240	290	385	290	400
Feb	90	80	160	127	110	180
Mar	260	210	410	490	210	300
Apr	310	360	270	550	230	
May	250	340	170	520	140	
Jun	380	40	80	240	370	
Jul	400	50	280	490	420	
Aug	580	570	370	280	360	
Sep	590	590	360	660	500	
Oct	340	710	420	356	110	
Nov	130	480	303	260	140	
Dec	270	430	361	500	220	
<b>Total</b>	<b>3740</b>	<b>4100</b>	<b>3474</b>	<b>4858</b>	<b>3100</b>	



With anticipated higher tariff proposal in china to curb smuggling of sugar in country, this could see relative lower import in 2017 translating into international price on subdued note moving forward.

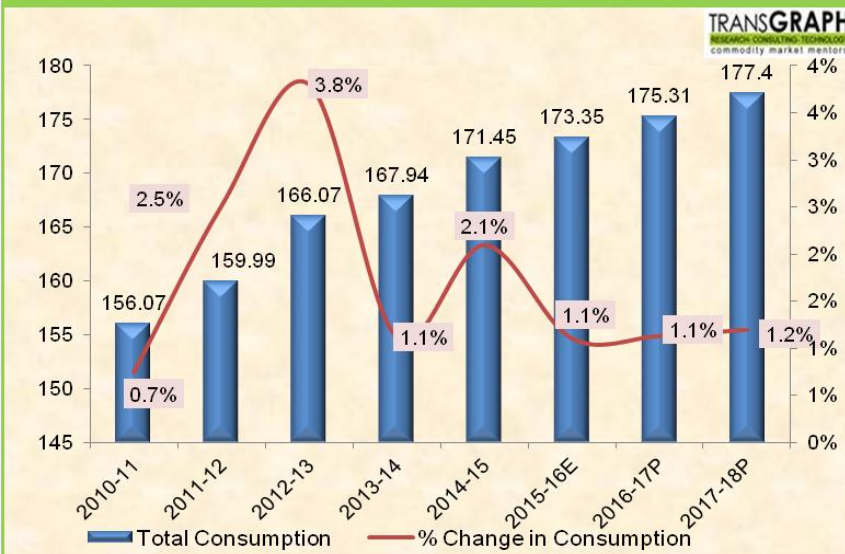
# Global Production & Consumption trends for SS 2017/18

TransGraph

## GLOBAL SUGAR PRODUCTION (17-18 P)



## GLOBAL SUGAR CONSUMPTION (17-18 P)

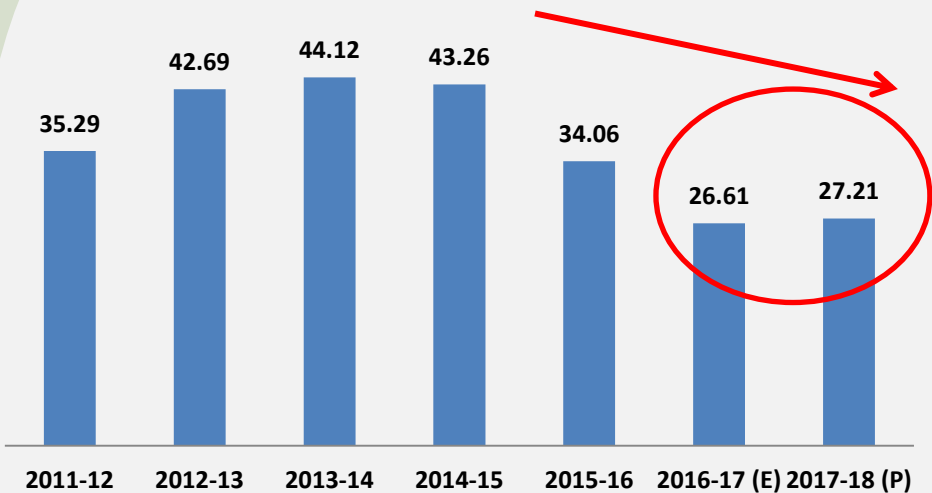


Production & consumption figure in Mln ton

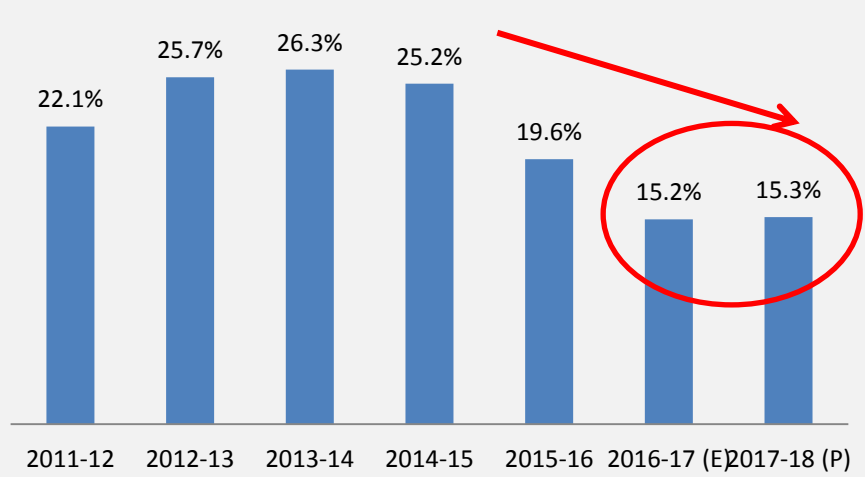
- ❖ Global Sugar production for 2017/18 is projected to increase +6.2% (net **+10.5** mln tons), on back of better cane prospects from India, EU, Thailand and China.
- ❖ Global Sugar Consumption for 2017/18 is expected to increase marginally 1.2% (net +2.1 mln ton) to 177.4 mln ton on steady demand from developing country.

*Falling Sugar Ending stock and S/C ratio globally below 2 monthly consumption requirement*

Global Sugar Ending Stock (Mln Ton)



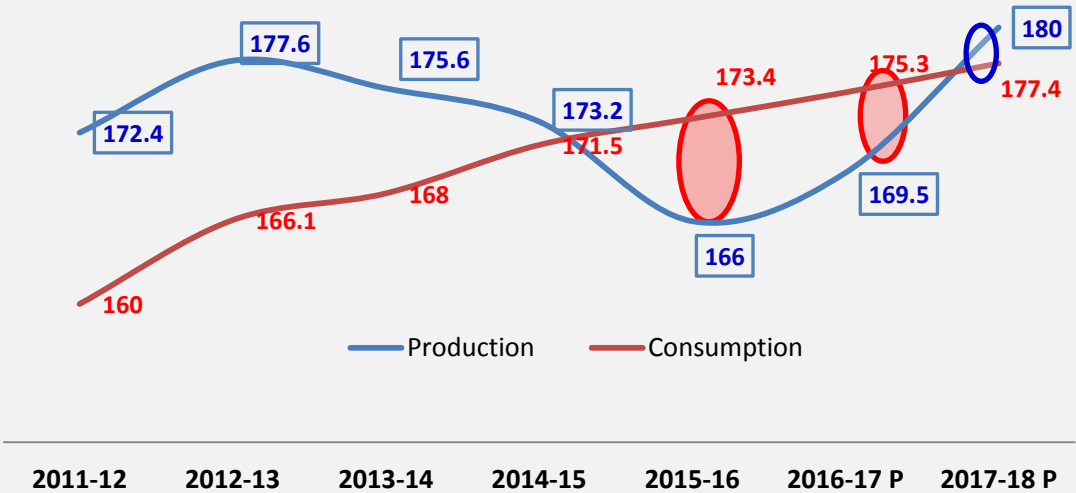
Global Sugar S/C Ratio



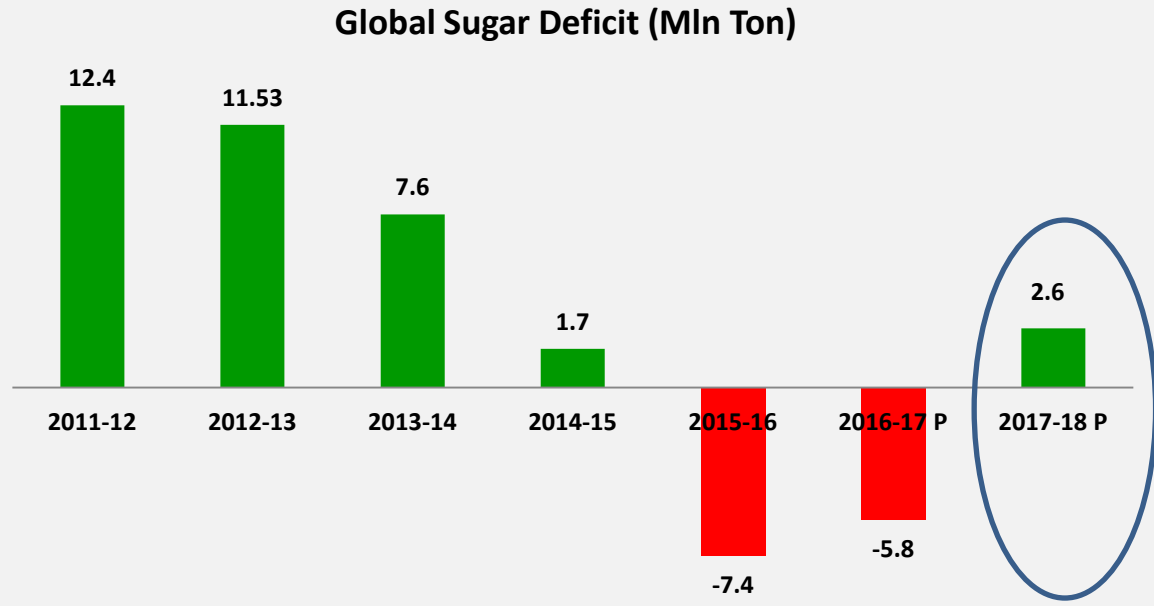
With avg. ~ 176 mln ton annual requirement for global consumption, monthly requirement stands at ~14.6 mln ton. Currently 26.61 mln ton stock remaining at end of 16/17 season Apr 2017 is below 2 month requirement this could result in global prices to be relative firm in 17/18 season resisting fall below 15 cents/lb at NY raw sugar counter. Further S/C ratio in 16/17 and 17/18 is critically low at 15.2% and 15.3% respectively.

*In 17/18 Global sugar production projected to be +2.6 mln ton higher than consumption*

Global Sugar Consumption & Production (Mln Ton)



*In 17/18 Global Sugar production will be in surplus by +2.6 mln ton vis a vis -5.8 mln ton deficit in 16/17...*



# Global Sugar Balance Sheet- Mln Ton

TransGraph

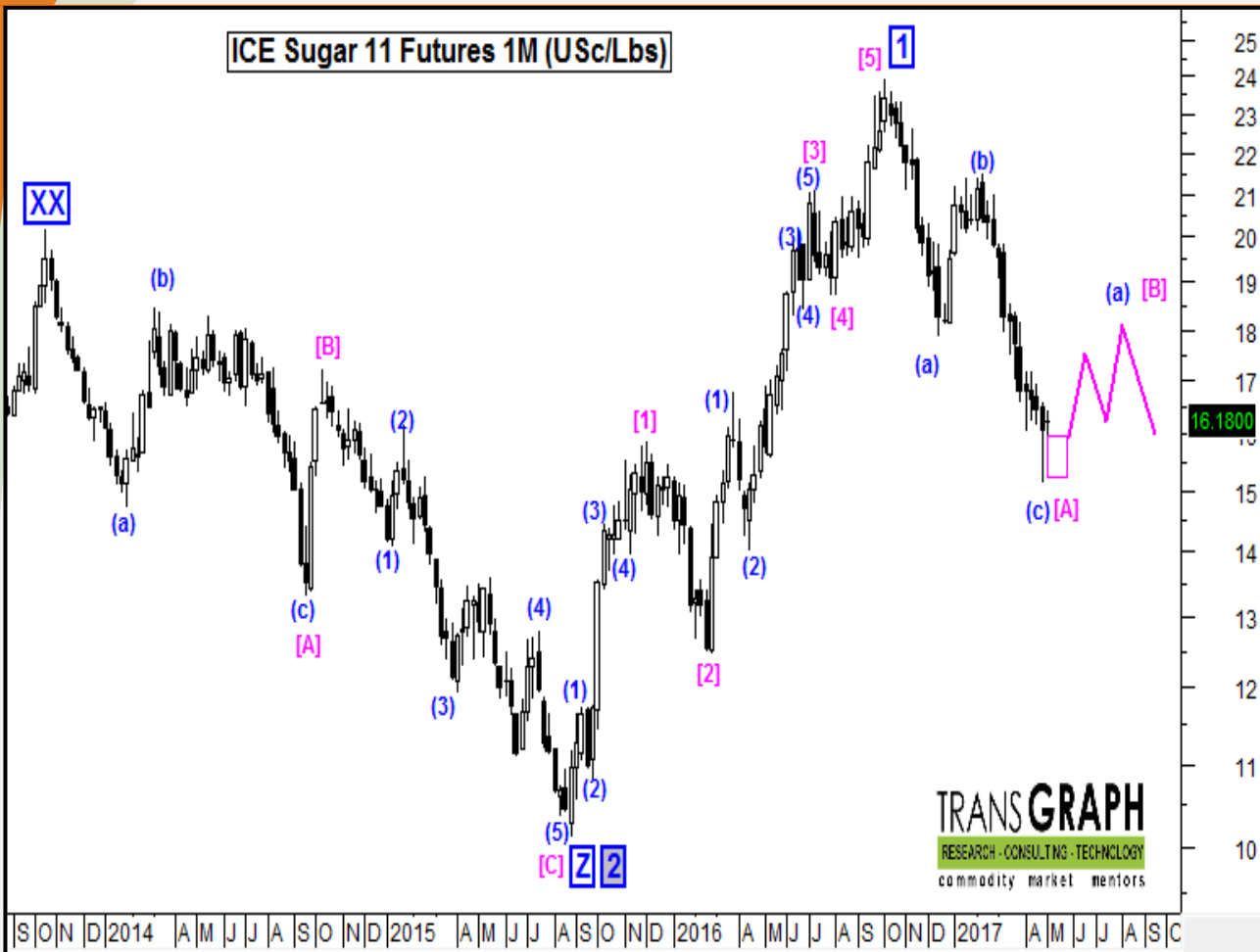
Attribute ( May-Apr)	2012-13	2013-14	2014-15	2015-16	2016-17E	2017-18 P
Beginning Stocks	35.29	42.69	44.12	43.26	34.06	26.61
Total Sugar Production	177.6	175.6	173.2	166	169.5	180.0
Total Imports	51.01	51.3	51.55	52.16	53.66	54
Total Supply	263.9	269.59	268.87	261.42	257.22	260.6
Total Exports	55.14	57.53	54.16	54.01	55.3	56
Total Consumption	166.07	167.94	171.45	173.35	175.31	177.4
Total Demand	221.21	225.47	225.61	227.36	230.61	233.4
Ending Stocks	42.69	44.11	43.26	34.06	26.61	27.21
S/C ratio (Stock/Consumption)	25.71%	26.27%	25.23%	19.65%	15.18%	15.34%
Deficit /Surplus (Production - Consumption)	+11.53	+7.66	1.75	-7.35	-5.8	+2.6



# *TECHNICAL ANALYSIS- GLOBAL*



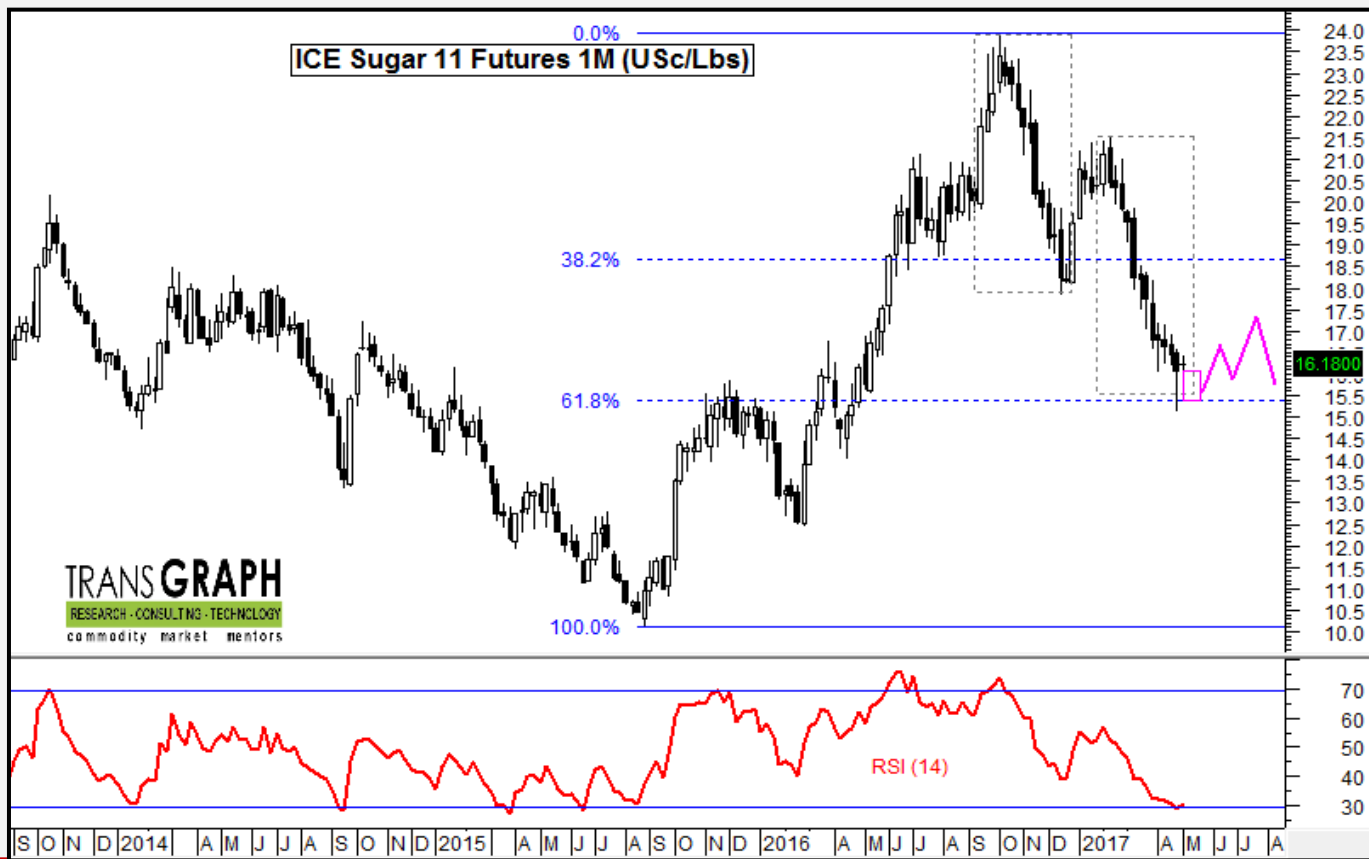
# ICE Sugar 11 Futures



- According to Elliott wave, prices have culminated the primary wave “1” at Usc 24.00 and turned negative.
- Prices have witnessed bearish “Zigzag” structure with A=C towards Usc 15.10 levels as intermediate wave “A” within primary wave “2”.
- Now prices likely to consolidate towards Usc 17.70 levels as intermediate wave “B” in the coming 2-3 months.
- **Note: Any close above Usc 18.20 will leads to sharp gains further towards Usc 20.00 levels.**

# ICE Sugar 11 Futures

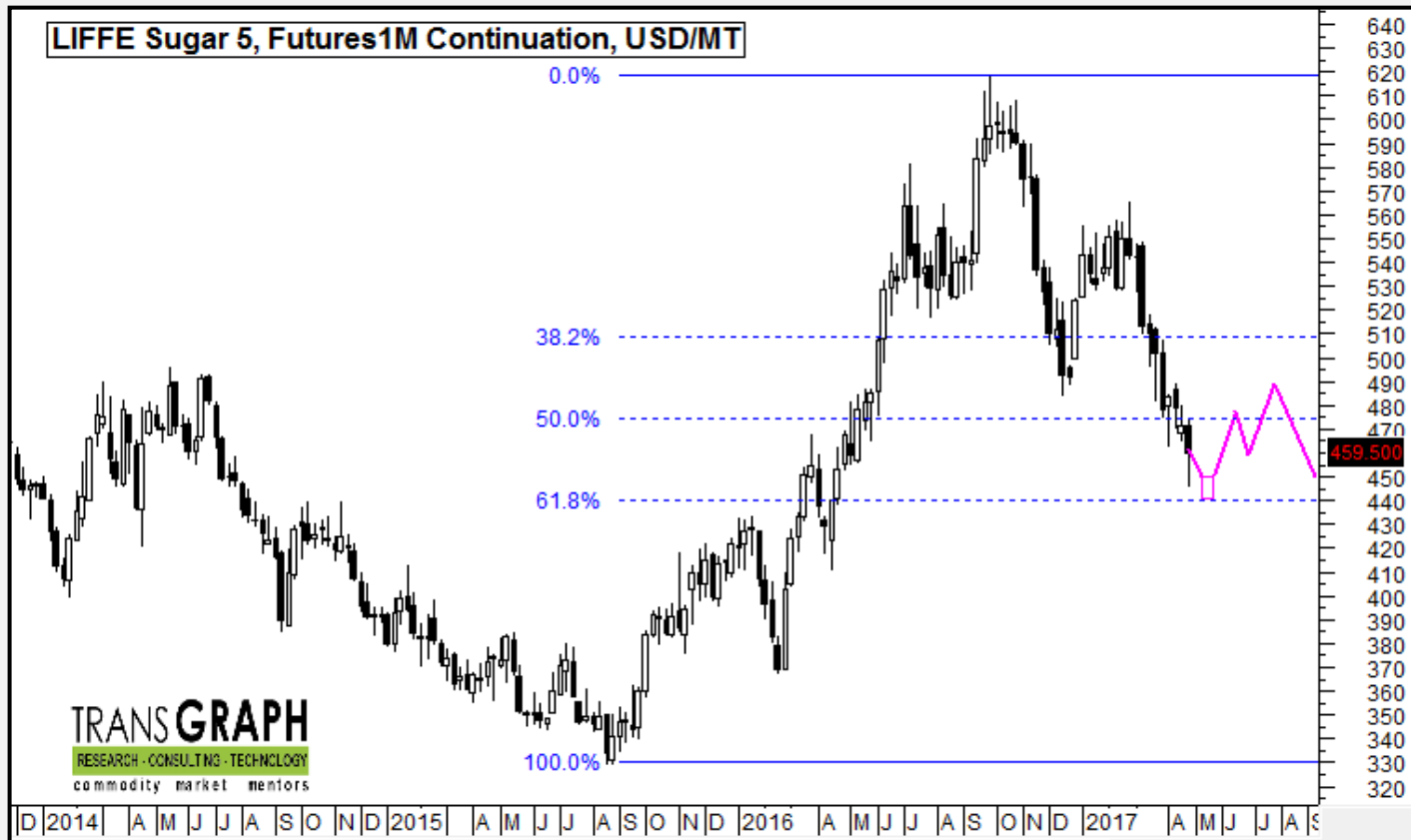
TransGraph



ICE Sugar 11 Futures prices are likely to stay above USc 15.00 and consolidate towards USc 17.70 in the coming 2-3 months, price recovery above USc 18.20 will negate the down side potential and extend the gains towards USc 20.00 levels..

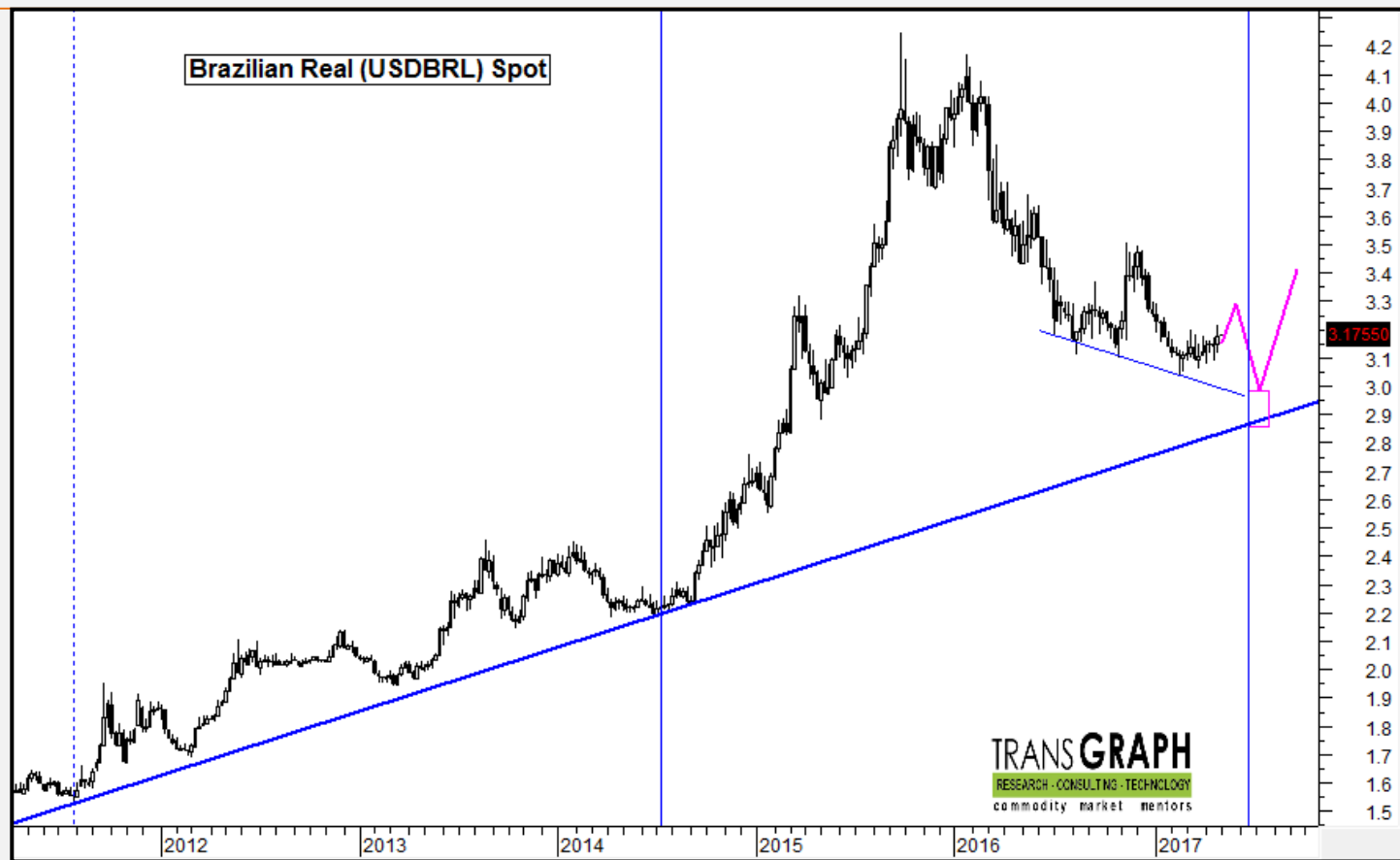
# LIFFE Sugar 5 Futures

TransGraph



The corrective rise in LIFFE Refined Sugar No. 5 Futures prices are likely to find support around USD 440 and trade higher towards USD 490 levels in the coming 2-3 months.

# Brazilian Real price outlook



TransGraph

Brazilian Real (USDBRL) prices are likely to find support around 2.9 and turn positive towards 3.4 in the coming 3-4 months.



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