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**Report Highlights:**

**India's 2003/04 sugar production is forecast to decline six percent to 18.8 million metric tons (raw value basis), on forecast lower sugarcane production. Despite government incentives to liquidate high sugar stocks through exports, internationally uncompetitive Indian sugar prices will likely limit exports to one million metric tons, mainly to neighboring markets.**

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Includes PSD changes: Yes  
Includes Trade Matrix: Yes  
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*Table of Contents*

<b>SECTION I - SITUATION AND OUTLOOK</b> .....	<a href="#"><u>Page 2 of 14</u></a>
<b>Production</b> .....	<a href="#"><u>Page 2 of 14</u></a>
<b>Consumption</b> .....	<a href="#"><u>Page 2 of 14</u></a>
<b>Trade</b> .....	<a href="#"><u>Page 3 of 14</u></a>
<b>SECTION II - STATISTICAL SECTION</b> .....	<a href="#"><u>Page 5 of 14</u></a>
<b>Table 1 - Commodity: Centrifugal Sugar (raw value basis)</b> .....	<a href="#"><u>Page 5 of 14</u></a>
<b>Table 2 - Commodity: Sugarcane</b> .....	<a href="#"><u>Page 6 of 14</u></a>
<b>Table 3 - Sugarcane Area, Production, and Utilization</b> .....	<a href="#"><u>Page 7 of 14</u></a>
<b>Table 4 - Mill Sugar Production* by State in India</b> .....	<a href="#"><u>Page 8 of 14</u></a>
<b>Table 5 - Price Table: Centrifugal Sugar (price on actual weight basis)</b> .	<a href="#"><u>Page 9 of 14</u></a>
<b>Table 6 - Price Table: Gur (price on actual weight basis)</b> .....	<a href="#"><u>Page 10 of 14</u></a>
<b>Table 7 - Price Table: Sugarcane Price - MSP and SAP (Rs./MT)</b> .....	<a href="#"><u>Page 11 of 14</u></a>
<b>Table 8 - Export Trade Matrix: Centrifugal Sugar</b> .....	<a href="#"><u>Page 12 of 14</u></a>
<b>SECTION III - Narrative on Production Policy &amp; Developments</b> .....	<a href="#"><u>Page 13 of 14</u></a>
<b>Cane Pricing</b> .....	<a href="#"><u>Page 13 of 14</u></a>
<b>Sugar Market Release</b> .....	<a href="#"><u>Page 13 of 14</u></a>
<b>Ethanol Program</b> .....	<a href="#"><u>Page 13 of 14</u></a>
<b>Sugar Development Fund (SDF)</b> .....	<a href="#"><u>Page 14 of 14</u></a>

**SECTION I - SITUATION AND OUTLOOK**

Note : All figures are raw-value basis unless otherwise noted.

**Production**

Total centrifugal sugar production in marketing year 2003/04 is forecast at 18.8 million metric tons (MMT) (including 620,000 metric tons of Khandsari - a low recovery centrifugal sugar), down 6 percent from the 2002/03 estimate on forecast tight sugarcane supplies. Gur (crude non-centrifugal sugar) production is forecast to improve to 6.7 MMT compared to 6.3 MMT last year. Delayed cane payments to farmers, coupled with adverse planting conditions in some drought hit areas, are expected to lower the 2003/04 cane area by 5 percent to 4.0 million hectares. Anticipating normal weather conditions and adequate 2003 monsoon precipitations, 2003/04 sugarcane production is forecast at 275 MMT (vs. 285 MMT in 2002/03). Based on the revised estimates from the Ministry of Agriculture, cane area and production during MY 2001/02 and 2002/03 have been revised marginally higher.

Post's 2002/03 centrifugal sugar production estimate has been raised to 20.1 MMT, due to higher than anticipated sugarcane production and lower diversion of cane for production of the alternative sweetener 'Gur'. After the early drought conditions (June-August, 2002), rains during September/October improved the 2002/03 crop yield. The diversion of cane for Gur production was limited by depressed Gur prices (see Table 6) and consequent low cane price payments (rs. 450-550/ton vs. rs. 650-900/ton of last year) by Gur producers to farmers. Cane crushing by mills was delayed by 30-35 days starting end-November due to a cane price payment dispute between the mills and state governments (see Section III). Mill crushing is expected to continue through June; normally crushing ends in May. Due to poor financial conditions of the mills, the cane price payments to farmers have been severely delayed, with mills falling behind by 2-3 months on their cane payment schedule against the normal lag period of 2-3 weeks.

Three consecutive years (1999/2000 - 2001/02) of record sugar production have resulted in abnormally large sugar stocks and depressed sugar prices, leading to a severe financial crisis in the Indian sugar industry. Consequently, the government of India (GOI) has initiated the following measures to provide some fiscal relief to the sugar mills. A government buffer stock of 2.0 MMT was announced in November 2002, by releasing funds from the Sugarcane Development Fund (SDF). To enable the mills to pay the outstanding sugarcane payments to the farmers, GOI also allowed mills additional free sale sugar quotas. Financial institutions have been advised to provide loans to the mills at preferential terms. However, industry sources consider the GOI measures inadequate in mitigating the current financial crisis in the Indian sugar industry.

**Consumption**

Record sugar production and consequent low sugar prices have fueled sugar consumption in the recent years, as it grew by 11 percent and 5 percent during 2001/02 and 2002/03, respectively. Due to comparatively tight domestic supplies, consumption is forecast to grow only 3.6 percent in 2003/04 to 21.5 MMT. Based on the figures compiled by Indian Sugar Mills Association,

consumption in 2001/02 and 2002/03 has been raised to 19.8 and 20.8 MMT respectively. The upward adjustment is attributed to the 'additional quota' sugar sale allowed to the mills, estimates for which were not available earlier.

Local sugar prices during the 2002/03 season have been largely depressed on surplus supplies. Existing prices of sugar in major markets range from \$265 to \$295/ton and are expected to remain steady during the balance of CY 2003. Stocks held by the mills at the end of February 2003 are estimated at 17.6 MMT (vs. 18.3 MMT a year ago), and the 2001/02 ending stocks are estimated at 9.3 MMT. Stocks are forecast to decline to 5.6 MMT by the end of 2003/04 due to forecast lower production. These stocks are sufficient for the desired 'normal stocks' of three months of consumption requirement.

## Trade

The strong domestic production in the recent years and the resultant high sugar stocks have forced India to explore the export market. Sugar exports in 2003/04 are forecast at 1.0 MMT (vs. estimated 2002/03 exports of 1.7 MMT) on relatively tight sugar supplies. Relatively high India sugar prices vis-a-vis international quotations have limited export opportunities to neighboring countries such as Bangladesh and Sri Lanka, along with Indonesia, Middle East, Africa, and quota exports (EU and US). Sugar imports are virtually precluded in 2003/04 by virtue of a tariff of 60 percent plus a countervailing duty of rs. 850/ton, the GOI's policy of subjecting imported sugar to a levy requirement and market release quotas, and the tightening of duty-free import against re-exports norms.

The GOI has extended sugar export incentives such as an exemption from levy sugar requirements, periodic sales quota restrictions, and domestic excise taxes (rs. 850/ton). In July 2002, the GOI announced an inland freight subsidy (cost of transport from mill to Port) of \$12 to \$14 per ton funded from the Sugarcane Development Fund (SDF- see Section III). An ocean freight subsidy of \$7 per ton, also funded from SDF, was further extended in the February 28, 2003 budget. Some mills also find it advantageous to liquidate their excess sugar stocks through exports in order to minimize storage costs, interest cost on credit, and physical/quality damage to sugar, leading to an estimated gain of \$10-\$12 per ton). Consequently, despite local sugar prices (\$265-295 per ton) being well above world market levels, sugar export prospects improve when FOB prices at least cover the variable costs (\$205-220 per ton).

MY 2002/03 exports through end February, 2003, are estimated at 992,000 tons at prices ranging from \$210-214/ton (FOB). Exports during March/April are expected to remain strong, but trade sources expect a slowdown in export off take during the remainder of MY 2002/03, on lack of demand from major buyers and the impending arrival of cheaper Thai and Brazilian sugar. Consequently, sugar exports are expected to reach 1.7 MMT during MY 2002/03. Based on revised estimates from the Indian Sugar Mills Association, MY 2000/01 exports and imports are revised higher to 1.13 MMT (Table 7) and 100,000 tons, respectively. The 2000/01 imports were basically Brazilian raw sugar against exports of value-added crystal sugar (duty-free 1.2 MMT of raw sugar for value addition and re-export of 1.0 MMT of crystal sugar). Owing to a heavy outcry by the local industry (see IN2056), these norms were tightened effectively to end imports at the beginning of MY 2002/03.



**SECTION II - STATISTICAL SECTION**

Table 1 - Commodity: Centrifugal Sugar (raw value basis)

PSD Table							
Country:	India						
Commodity:			Sugar				
		2002		2003		2004	UOM
	Old	New	Old	New	Old	New	
Market Year Begin		10/2001		10/2002		10/2003	(MONTH/ YEAR)
Beginning Stocks	11985	11985	13000	11670	0	9340	(1000 MT)
Beet Sugar Production	0	0	0	0	0	0	(1000 MT)
Cane Sugar Production	20340	20475	18850	20100	0	18800	(1000 MT)
TOTAL Sugar Production	20340	20475	18850	20100	0	18800	(1000 MT)
Raw Imports	30	100	50	20	0	0	(1000 MT)
Refined Imp.(Raw Val)	0	0	0	0	0	0	(1000 MT)
TOTAL Imports	30	100	50	20	0	0	(1000 MT)
TOTAL SUPPLY	32355	32560	31900	31790	0	28140	(1000 MT)
Raw Exports	0	0	0	0	0	0	(1000 MT)
Refined Exp.(Raw Val)	900	1130	1000	1700	0	1000	(1000 MT)
TOTAL EXPORTS	900	1130	1000	1700	0	1000	(1000 MT)
Human Dom. Consumption	18455	19760	19000	20750	0	21500	(1000 MT)
Feed Dom. Consumption	0	0	0	0	0	0	(1000 MT)
TOTAL Dom. Consumption	18455	19760	19000	20750	0	21500	(1000 MT)
Ending Stocks	13000	11670	11900	9340	0	5640	(1000 MT)
TOTAL DISTRIBUTION	32355	32560	31900	31790	0	28140	(1000 MT)

Note: Stocks in PS&D include only milled sugar, as all khandsari sugar is assumed to be consumed within the production year. Virtually no centrifugal sugar is utilized for alcohol, feed, and other non human consumption.

Table 2 - Commodity: Sugarcane

PSD Table							
Country:							
Commodity:	Sugar Cane Centrifugal						
		2002		2003		2004	UOM
	Old	New	Old	New	Old	New	
Market Year Begin							(MONTH/ YEAR)
Area Planted	4200	4350	4150	4200	0	4000	(1000 HA)
Area Harvested	4200	4350	4150	4200	0	4000	(1000 HA)
Production	295000	300100	275000	285000	0	275000	(1000 MT)
TOTAL SUPPLY	295000	300100	275000	285000	0	275000	(1000 MT)
Utilization for Sugar	188500	190820	174500	188000	0	175000	(1000 MT)
Utilizatr for Alcohol	106500	109280	100500	97000	0	100000	(1000 MT)
TOTAL UTILIZATION	295000	300100	275000	285000	0	275000	(1000 MT)

Note: Virtually no cane is utilized for alcohol. Utilization for alcohol data include cane used for gur, seed, feed and waste. Utilization for sugar data include cane milled to produce centrifugal sugar, including khandsari.

Table 3 - Sugarcane Area, Production, and Utilization

YEAR		AREA	1/	YIELD	1/	PRODUCTION	1/	SUGAR	2/	KHANDSARI	3/	GUR	3/	SEED	3/
		Mha		MT/ha		MMT		MMT		MMT		MMT		MMT	
1985/86		2.86		59.99		171.68		68.977		10.481		71.621		20.602	
1990/91		3.69		65.39		241.04		122.319		13.175		76.626		28.925	
1995/96		4.15		68.02		282.09		174.761		10.000		67.268		30.060	
2000/01		4.30		69.63		299.21		176.650		11.000		75.657		35.905	
2001/02		4.35		68.99		300.10		180.320		10.500		73.268		36.012	
2002/03		4.20		67.86		285.00		178.000		10.000		62.800		34.200	
2003/04	3/	4.00		68.75		275.00		165.000		10.000		67.000		33.000	

Source: 1/ - Directorate of Economics & Statistics, Ministry of Agriculture, GOI

2/ - Indian Sugar Mills Association

3/ - FAS/New Delhi estimate/forecast



Table 4 - Mill Sugar Production\* by State in India

State	2000/01	2001/02	2002/03	2003/04
	Actual	Actual	Revised	Forecast
Andhra Pradesh	10.2	10.5	10.5	10.0
Bihar	2.9	3.4	3.0	3.0
Gujarat	10.7	10.6	11.0	10.0
Haryana	5.9	6.2	5.6	5.5
Karnataka	16.0	15.5	16.0	15.0
Maharashtra	67.1	56.1	58.0	54.0
Punjab	5.0	5.9	5.5	5.5
Tamil Nadu	17.8	18.4	18.0	17.0
Uttar Pradesh	43.9	52.6	48.0	45.0
Others	5.6	6.0	6.4	5.0
Total	185.1	185.3	182.0	170.0

\* Khandsari sugar production not included in the table as breakup by state is not available.

Source:

2000/01 to 2001/02: Indian Sugar Mills Association

2002/03 and 2003/04: FAS/New Delhi estimates

Table 5 - Price Table: Centrifugal Sugar (price on actual weight basis)

Prices Table			
Country:			
Commodity:			
Year:	2003		
Prices in (currency)	rupees	per (uom)	Metric Tons
Year	2002	2003	% Change
Jan	13950	12550	-10.0%
Feb	14250	12950	-9.1%
Mar	14750	12750	-13.6%
Apr	14300		-100.0%
May	13600		-100.0%
Jun	13400		-100.0%
Jul	13350		-100.0%
Aug	13300		-100.0%
Sep	13620		-100.0%
Oct	13400		-100.0%
Nov	13370		-100.0%
Dec	12770		-100.0%
Exchange Rate	47.31	(Local currency/ US \$)	
Date of Quote	April 10/2003	(MM/DD/ YY)	

Source & contract terms: Indian Sugar Mills Association, month end prices in the wholesale market, Delhi.

Table 6 - Price Table: Gur (price on actual weight basis)

Commodity:	Gur		
Year:	2003		
Prices in (currency)	rupees	per (uom)	Metric Tons
Year	2002	2003	% Change
Jan	10750	9500	-11.6%
Feb	10250	8500	-17.1%
Mar	10500	9000	-14.3%
Apr	11000		-100.0%
May	12000		-100.0%
Jun	12250		-100.0%
Jul	13250		-100.0%
Aug	14250		-100.0%
Sep	14000		-100.0%
Oct	10000		-100.0%
Nov	8750		-100.0%
Dec	8400		-100.0%
Exchange Rate	47.31	(Local currency/US \$)	
Date of Quote	April 10/2003	(MM/DD/Y Y)	

Source & contract terms: Indian Sugar Mills Association, month end prices in the wholesale market, Delhi.

Table 7 - Price Table: Sugarcane Price - MSP and SAP (Rs./MT)

PRICE	2002/03	2001/02	2000/01
Minimum Support Price (MSP)*	695	620	595
State Advised Price for			
Uttar Pradesh@	690-900	950-1000	900
Haryana/Punjab	NA	1050-1100	1050
Southern States	NA	750-780	760

\*: MY 2002/03 MSP linked to a basic recovery rate of 8.5 percent, Premium of rs. 82 for every 0.1 percent increase in recovery over 8.5% basic recovery rate.

Exchange Rate: 1999/00 (Oct/Sept) 1 US\$ = 43.5 Indian Rs.  
 2000/01 (Oct/Sept) 1 US\$ = 46.5 Indian Rs.  
 2001/02 (Oct/Sept) 1 US\$ = 48.5 Indian Rs.  
 April 10, 2003 1 US\$ = 47.31 Indian Rs.

Table 8 - Export Trade Matrix: Centrifugal Sugar (quantity in crystal/actual weight basis)

Export Trade Matrix			
Country:		Units:	Metric Tons
Commodity:			
Time period:	Oct-Sep		
Exports for	2002		2003
U.S.	8,140	U.S.	0
Others		Others	
Indonesia	575,888	Bangladesh	253,945
Sri Lanka	197,080	Indonesia	230,421
Bangladesh	114,940	Sri Lanka	151,004
EU	40,217	Yemen	59,826
Dubai	31,478	Egypt	48,550
Sudan	26,518	Somalia	39,100
Somalia	15,300	Iraq	34,808
Yemen	14,270	Djibouti	18,850
Iraq	13,125	Eritrea	17,550
Afghanistan	7,000	Afghanistan	14,475
Total for Others	1,035,816		868,529
Others not listed	16,176		58,688
Grand Total	1,060,132		927,217

Note: Export figures for 2003 shows exports during October 2002 through February 2003.

Source: Indian Sugar Exim Corporation.

### ***SECTION III - Narrative on Production Policy & Developments***

**Cane Pricing:** Each year the GOI establishes a minimum support price (MSP) for sugarcane, which state governments typically augment by 20-50 percent. The sugar mills have to pay the effective state advised price (SAP) for the sugarcane. The successive increase of cane prices (largely for political purposes) in the past years has pushed the cost of Indian sugar production abnormally high (an estimated \$270-280/ton), in addition to causing the current supply glut in sugarcane and sugar. Although local industry has been strongly advocating rationalization of the cane pricing policy (by linking it to sugar prices in the domestic/world markets), the political muscle of the farmers' lobby has forced the GOI and various state governments to maintain the current policy. Forced by current financial crisis, local industry refused to take sugarcane at SAP at the start of MY 2002/03 and filed a case in the Supreme Court of India against the state governments' policy of arbitrarily fixing the SAP. In an interim order issued in late November, the court directed the mills to pay the farmers the central government announced MSP until the final decision is made on the applicability of SAP. Therefore, private sugar mills have been paying the MSP during the current season. Market sources expect this to be temporary relief, as the state governments may formulate ways to force the mills to pay higher prices even if the court decides against the SAP. Meanwhile, the state owned mills continue to pay the SAP, even though, their cane payment backlogs to the farmers are 2-3 times that of the private mills.

**Sugar Market Release:** Mills are required to supply a portion of their production as 'levy sugar' at below market prices, which the government then sells through its public distribution system (PDS) to consumers below the poverty line. The mills are further required to sell the balance of the 'free sugar' at market prices. However, the free sale sugar and levy sugar sales are subject to periodic quotas so as to maintain price stability in the market. Over the past few years, the GOI had a phased policy of liberalization of the sugar marketing system, with the proportion of levy sugar progressively scaled down from historical levels of 40 percent (Pre-Jan 2000) to 10 percent (April 2002 onwards) of total production. To provide more marketing flexibility to the mills, the government has changed the free sale sugar quota release mechanism from a monthly to quarterly basis from January 2002, with the clause that 50 percent of the quota is utilized in each half of the quarter. In 2002, the government granted permission to three companies for futures trading in sugar, although actual trading has yet to commence due to lack of interest in the trade. The GOI plans complete removal of the levy requirement and sugar release mechanism in the near future. Once that happens, the government will procure sugar from the market for subsidized sale through the PDS, and will allow futures trading to take care of stabilizing market prices.

**Ethanol Program:** To ease the current supply glut of sugar and sugarcane, the GOI has launched a program for production of ethanol from molasses and sugarcane juice for fuel purposes. The ethanol program was launched in nine selected states in January 2003, with the annual production target of 320-350 million liters. The ethanol supplied by the domestic mills will be procured by the petroleum companies (all government parastatals), and mixed with petrol/gasoline at the ratio of 5 percent ethanol. Due to inadequate supplies of ethanol, the deadline for production and sale of ethanol mixed petrol/gasoline has been postponed to the end of June 2003. Market sources report that 125-130 million liters of ethanol production capacities have been installed till now, mostly for ethanol derived from molasses. Since production of ethanol from sugarcane

juice/syrup requires additional investment for technological modification, most mills will likely wait and watch for some time to see the market demand for ethanol before installing the necessary units.

**Sugar Development Fund (SDF):** The GOI levies a cess of rs. 140 per ton on sugar produced by the domestic mills for the SDF. The SDF is used for conducting various research, extension, and technological improvement activities in support of sugarcane and sugar production in India. In recent years, these funds have been used to support buffer stocks, provide internal transport subsidy and ocean freight subsidies for exports of sugar, and offer soft loans for the installation of power generation and ethanol production facilities. However, most of these measures are "temporary sops" to provide financial relief to the mills.