

COMMISSION FOR AGRICULTURAL COSTS AND PRICES

Report on Price Policy for Sugarcane

For the 2007- 08 sugar season

In this report, the Commission for Agricultural Costs and Prices presents its views on the price policy for sugarcane for 2007-08 sugar season. The Commission recommends that:

- (i) the Statutory Minimum Price (SMP) of sugarcane payable by sugar factories for 2007-08 sugar season be fixed at Rs. 81.18 per quintal for a basic recovery rate of 9 per cent subject to a premium of Rs. 0.90 for every 0.1 percentage point increase in the recovery above that level. At the All-India average recovery rate of 10.2 per cent achieved in 2004-05 season, the SMP recommended comes to Rs. 92.00 per quintal. (Para 25)**
- (ii) the SMP of sugarcane for 2006-07 season be announced by the Government with no further delay; (Para 2)**
- (iii) the Government should reconsider the ban on exports of sugar and allow the industry to fulfill their remaining export obligations for the current year. Besides, Government should formulate a long term policy to encourage and enable the Indian sugar industry to be present in the export market on sustainable basis and also become globally competitive; (Para 6)**
- (iv) the exercise of revision in the weighing diagram of WPI for evolving new base series should re-look at the weights assigned to sugar, khandsari and gur in WPI, in comparison to other food items and their consumption share; (Para 8)**

- (v) ***the Government should review the functioning of release mechanism so as to bring transparency and efficiency;***
(Para 9)
- (vi) ***the Central Government should declare 'L' factor for 2004-05 season within a time frame of next three months; any further delay in action by the Government may be construed as anti-farmer;***
(Para 10)
- (vii) ***the Government should consider the demand by sugar industry that the radial distance between sugar mills be increased to 25 k.m from the existing norm of 15 k.m;***
(Para 13)
- (viii) ***the Central Government should bring about modifications in Sugarcane (Control) Order 1966 to facilitate and encourage Contract farming in sugarcane cultivation;***
(Para 14)
- (ix) ***the Department of Food should take-up, on a priority basis, with the Ministry of Power to implement the recommendations of the Committee constituted by the Central Electricity Authority to encourage co-generation of power by sugar mills;***
and
(Para 15)
- (x) ***the Government should carry out necessary amendments to the Co-operative Act to enable the co-operative sugar mills to have access to IPO, External Commercial Borrowings and Right Issues etc, on par with the sugar mills in private sector.***
(Para 18)

2. The Commission submitted its report on price policy for sugarcane for 2006-07 sugar season on 3.8.2005, recommending SMP to be payable to farmers by sugar mills. The Government is yet to take a view on the recommendations. The Commission has been urging the Government in every report that SMP be announced well before the start of sowing

season, so that appropriate price signals are given to the farmers for taking decision on acreage. However, it is unfortunate that even after about one year time available with the Government, the SMP has not been announced. The Commission would urge again that ***the SMP of sugarcane for 2006-07 season be announced by the Government with no further delay.***

3. The analysis of data regarding area, production and yield of sugarcane during the past one decade reveal very interesting result. The production of sugarcane that has been steadily rising since 1996-97, reached its peak level of 299.32 million tonnes in 1999-2000. While the sub-tropical region (Uttar Pradesh, Uttaranchal, Bihar, Punjab and Haryana) having 56 percent of total sugarcane area in India contributed 45 percent of total production, the tropical region (Maharashtra, Gujarat, Andhra Pradesh, Karnataka and Tamil Nadu) accounting for 41 percent of total area contributed 53 percent of total production. The undivided Uttar Pradesh then having 48 percent of total sugarcane area contributed only 39 percent of the all India production. There exists a dichotomy in the yield profile of sugarcane between tropical and sub-tropical regions. The sugarcane yield in the states of sub-tropical regions is invariably 15 to 20 percent lower than national average where as in states of tropical regions, the productivity is higher than the national average by about the same margin. During the period 1985-86 to 1995-96, the productivity of sugarcane increased at 1.58 percent per annum. The productivity increase in case of sub-tropical region was impressive 2.14 percent per annum, while in tropical region there was near stagnation with productivity modestly declining at 0.11 percent per annum. During 1995-96 to 2004-05, the sugarcane productivity in the country decelerated at 1.18 percent per annum. During this period the productivity growth momentum in sub-tropical region was lost and in tropical region there was a sharp decline at 1.56 percent per annum. Important factors for this declining trend are

scanty rainfall and drought-like condition experienced year after year in peninsular India and severe outbreak of white woolly aphids on sugarcane that reduced the yield to a great extent. The all time record productivity of sugarcane in the country was achieved in 1994-95 and despite tall claims by research institutions, no new milestone of productivity could be achieved in the past ten years. The virtual stagnation of productivity dissipate the development efforts of imbining efficiency in the sugarcane economy as well as in the sugar economy of the country.

4. The Fourth Advance Estimates released by the Directorate of Economics & Statistics (DES) on 15.07.2006 place the sugarcane production in 2005-06 at 278.39 million tonnes which is about 17 percent higher than the level in 2004-05. The DES has not released state-wise data on sugarcane production for 2005-06, so far. However, based on the feedback that the Commission received from States, it is expected that the production estimates for 2005-06 would be higher than that in 2004-05; and also during 2006-07. Favourable price realization from sugarcane by the farmers has induced increase in acreage, particularly in states like Uttaranchal, Bihar, Punjab, Haryana, Maharashtra and Andhra Pradesh.

5. Generally, in a normal year of sugarcane production, about 60-65 percent of cane is crushed by sugar mills and the balance goes for khandsari, gur, seed & feed. However, in a year of low production, the proportionate cane availability for sugar mills also comes down. That exactly happened during 2003-04 and 2004-05, when sugarcane production came down to 233.86 million tonnes and 237.08 million tonnes respectively. The cane crushed by sugar mills in 2003-04 and 2004-05 got reduced to about 56 percent and 53 percent of the total availability and, as a result, sugar production got substantially reduced from 201.32 lakh tonnes in 2002-03 to 139.58 lakh tonnes in 2003-04 and 129.80 lakh tonnes in 2004-05. However, in the current sugar year 2005-06, it is

expected that out of 278.39 million tonnes, about 184.3 million tonnes (over 65 percent) of sugarcane may be crushed.

6. In the wake of low availability of sugarcane and resultant lower production of sugar, the sugar industry was allowed to import 20.74 lakh tonnes of raw sugar during 2004-05 under Advance Licensing Scheme. With domestic sugar output set to recover in the current season 2005-06, the Government has discontinued with the existing concessions of duty free import of raw sugar under the Scheme. However, the export obligation of sugar under advance licensing scheme, works out to about 21 lakh tonnes. Out of the total quantity, about 9 lakh tonnes have been exported and the balance of about 12 lakh tonnes are yet to be shipped. The Government in the meantime has issued a notification banning export. The Commission feels that the export of sugar needs to be encouraged as a matter of policy. Currently, Indian sugar has become competitive in view of moderate increase in world sugar price. If sugar sector needs to be geared up to face world competition, a long term export policy must be put in place to allow Indian sugar industry to compete in the world market. Abrupt changes in export policy will do more harm than any benefit to the sector, because export of commodity is possible only through long-term relationship with the foreign buyers. The Commission therefore recommends that ***the Government should reconsider the ban on exports of sugar and allow the industry to fulfill their remaining export obligations for the current year. Besides, Government should formulate a long term policy to encourage and enable the Indian sugar industry to be present in the export market on sustainable basis and also become globally competitive.***

7. The month-end wholesale prices of sugar in different up markets indicates that there has been a rising trend in the prices of sugar during 2003-04. The average wholesale prices of sugar per quintal that was

quoted between Rs.1431 (Jallandar) to Rs.1574 (Patna) in 2003-04 jumped to Rs.1779 (Jallandar) to Rs.1837 (Patna) in 2004-05 and further to Rs.1926 (Jallandar) to Rs.1962 (Patna) in October 04 - May 2005. With a relatively higher weightage of sugar in wholesale price index, the increase in sugar price pushed up the wholesale price index of primary articles substantially from 174 in 2002-03 to 181.5 in 2003-04 and further to 188.1 in 2004-05. In terms of food articles, the index that was placed at 179.2 in 2002-03 increased to 181.5 in 2003-04 and 186.3 in 2004-05. The trend of WPI of sugar was indifferent to that of several other commodities. The WPI of sugar declined gradually from 141.2 in 1999-2000 to 119.0 in 2002-03. In 2003-04, the sugar prices had a smart recovery and WPI moved to 135.2. The increase in sugar prices continued in 2004-05 and the WPI stood at 157.9. During 2005-06 the sugar market continued its spiraling spree and the WPI in June 2005 stood firm at 172.9, 9 percent higher than the WPI of the corresponding month in the previous year. Though the prices of sugar in 2005-06 are 43 percent higher than 2002-03, compared to 1999-2000, the total increase in prices is 20 percent, reflecting a compound growth rate of 3.1 percent per annum.

8. It has been felt that the frequent modulation in the policy for sugar availability and its prices is due to its impact on overall price scenario, as measured by the design of wholesale price index. Some of the stakeholders apprehend that the weighting diagram is erroneous as commonsense observation does not support the high weightage. The total weight assigned to sugarcane and sugar in WPI (1993-94) base = 100 is 5.23369 which is higher than the total weight assigned to foodgrains (5.00949). The share of sugar in total per capita household consumption (NSS 55th round) is 2.16 percent as against 23.11 percent for that of foodgrains. Even if a margin of about 50 percent is given for marketable surplus ratio for foodgrains, as used for the methodology of

assigning weights in the WPI weighing diagram, the difference in the consumption share and the WPI weights in respect of foodgrains and sugarcane and sugar is apparently substantial. It is understood that the revision of the base of wholesale price index is underway. The Commission therefore recommends, that ***the exercise of revision in the weighing diagram of WPI for evolving new base series should re-look at the weights assigned to sugar, khandsari and gur in WPI, in comparison to other food items and their consumption share.***

9. The magnitude by which the sugar prices in the market has risen during the past two years clearly indicates that the release mechanism of the government has not served adequately as an effective instrument of regulating sugar prices in the market and thereby protect consumer interest. However, the current level of sugar price if linked to better price realization by farmers, may trigger favourable production response in sugarcane economy of the country. This is likely to build supply pressure in sugar economy. Considering the short term and medium term sugar price behaviour in the domestic market and the emerging supply scenario, the Commission feels that this is the appropriate time to allow the market to play freely that will ensure a good return to industry as well as a remunerative price to the farmers. The Commission therefore recommends that ***the Government should review the functioning of release mechanism so as to bring transparency and efficiency.***

10. The sugarcane (Control) order 1966 entitles the farmers to receive SMP plus the additional cane price, as provided in clause 5A. As per the provisions of the order, the farmers are entitled to receive 50 percent of the extra realization made by sugar factories under certain specified formula. The Central Government is to announce the zone-wise 'L' factor under clause 5A. Thereafter, the state Government issues factory-wise additional cane prices to be paid to farmers. The Commission has been

invariably urging in its report from time to time that the Central Government should expedite the announcement of 'L' factor just after the sugar season. However, it is disheartening to note that the 'L' factor for the year 2004-05 has not yet been announced by the Central Government. The Commission recommends ***the Central Government should declare 'L' factor for 2004-05 season within a time frame of next three months; any further delay in action by the Government may be construed as anti-farmer.***

11. The balance-sheet of sugar for the preceding three years is presented below: (In lakh tonnes)

SI No.	Particulars	2003-2004 Sugar Year (P)	2004-2005 Sugar Year (P)	2005-2006 Sugar Year (P)	2006-2007 Sugar Year (Est)
	Carry over stocks from previous				
1	season	116.16	83.33	40.91	36.91
2	Production of sugar	139.58	130	191	220
3	Import of sugar *	5.53	20.74	6.7	
4	Total Availability * (1 + 2)	261.27	213.33	231.91	256.91
5	Internal Consumption	175	171.44	185	192
6	Exports	2.94	0.98	10	20
7	Closing stocks at the end of season	83.33	40.91	36.91	44.91

* Import of Sugar (Raw) is accounted in production of sugar

(Data Source : Directorate of Sugar, Department of Food and Public Distribution)

For sugar season 2006-07, it is too early to estimate sugar production. However, on a conservative estimate, the production of sugar may be placed at 220 lakh tonnes. On the assumption that there will be no imports of sugar and the estimated carry over stock at 45 lakh tonnes, the total availability of sugar is placed at around 257 lakh tonnes. The total consumption, based on average consumption of 2003-04 to 2005-06, projected at 4% annual increment may be worked out at 192 lakh tonnes for the year. Exports of about 20 lakh tonnes will place the drawal of

sugar to 212 lakh tonnes for the year as a whole. Thus, estimated closing stocks of sugar by end of sugar season 2006-07 is likely to be around 45 lakh tonnes, which is sufficient to meet three months requirements of the next sugar season, 2007-08. The whole scenario suggests that the sugar season 2006-07 would remain fairly comfortable so far as availability is concerned. Therefore, on the price front, there may not be much disturbance affecting the consumer's interest.

12. International sugar season starts from September through August. The World production of sugar for 2005-06 is estimated at 150 million tonnes at the level of consumption. About 75 percent of the total production is made from cane and balance 25 from beet. Roughly about 70 percent of production is consumed in the domestic country of origin and the balance is traded in the World market. Five countries – Brazil, the European Union, Australia, Thailand and Guatemala supply about 80 percent of the total exports. India is, however, an ad-hoc exporter. While sugar consumption in most of the countries remains more or less at the previous year's level, there is an increase in per capita sugar consumption in China due to rapid economic development. Brazil remains the world's leading sugar exporter, followed by the European Union, Australia, Thailand and finally Guatemala. As the consumption level is more than the production, world raw sugar prices exhibited an upward movement from mid 2005. On a case filed in WTO jointly by Australia, Brazil and Thailand challenging the veracity of large scale subsidized exports of sugar under the guise of 'C' quota by the European Union, the WTO Dispute Settlement Board rejected the plea of the European Union of lower cost of production of 'C' quota sugar, and a decision was taken that 'C' quota export would be suspended by the end of May 2006. With this position, the prices of white sugar firmed up in sympathy with the rise in raw sugar prices. Between June 2005 and July 2006, an increase of

about 84 percent in international sugar prices took place corresponding to an increase of about 61 percent in case of raw sugar price during the same period. Also another significant factor that has impacted international price of sugar is the steep increase of crude oil and consequent increase in demand for ethanol. Brazil is the major ethanol producer through sugarcane route and USA is a significant user of ethanol. With the steep increase of prices of crude oil, the demand for ethanol has increased world over and it is expected that Brazil is going to enhance ethanol production diverting cane from sugar production. International sugar price, therefore, is expected to remain buoyant in the coming seasons.

13. During the past two years or so, due to certain policy support and incentives provided by some State Governments, new sugar mills have come up in backward rural areas. Due to competition among the mills, farmers are benefited in realizing higher cane price. There are reports that cane gets diverted from a particular zone to another. While modern high capacity sugar mills should be encouraged providing adequate cane area to become competitive and cost effective in sugar production, the fact remains that the existing mills should not be starved of sugarcane, making their operation unviable. The existing criteria of 15 k.m. distance for location of a sugar mill needs revision. The Commission recommends that ***the Government should consider the demand by sugar industry that the radial distance between sugar mills be increased to 25 k.m. from the existing norm of 15 k.m.***

14. Contract farming has been proved to be beneficial to both farmers and companies in some agricultural products, like basmati, tomato and potato etc. The Commission feels that contract farming in sugarcane production may be encouraged in a big way through appropriate modifications in Rules and Regulations under Sugarcane (Control) Order

1966. Contract farming will enable the farmers to adopt appropriate sugarcane varieties for higher recovery and at the same time, the mills will have direct obligation for cane development in their respective areas. The Commission recommends that ***the Central Government should bring about modifications in Sugarcane (Control) Order 1966 to facilitate and encourage Contract farming in sugarcane cultivation.***

15. The Commission understands that the Central Electricity Authority in the Ministry of Power constituted a Committee to examine the issue of co-generation of power by sugar mills in detail and make suitable recommendations. The report of the Committee is now under consideration of the Ministry of Power. The Commission recommends that ***the Department of Food should take-up, on a priority basis, with the Ministry of Power to implement the recommendations of the Committee constituted by the Central Electricity Authority to encourage co-generation of power by sugar mills.***

16. In order to reduce dependence on imported oil by way of encouraging use of bio-fuel, the Ministry of Petroleum and Natural Gas had notified on 3rd September 2002 the scheme for supply of 5 percent ethanol doped petrol (EDP) in nine states and four UTs w.e.f. 1st January 2003. The area that were notified were Andhra Pradesh, Goa, Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh and the Union Territories – Daman & Diu, Dadra Nagar Heveli, Chandigarh and Pondichery. The programme could have been introduced only in staggered manner. However, the Government notified again on 27.10.2004 in supersession of all earlier notification making sale of EDP as per BIS specifications with certain conditions. A Memorandum of Understanding was signed between M/S Indian Oil Corporation Ltd and Indian Sugar Mills Association for supply of ethanol in August 2005. At

present, purchase of ethanol is under implementation by oil marketing companies. The existing price at which the oil companies purchase ethanol is Rs.18.75 per litre. In the second and third phase, the Ministry intends to cover all States under 5 per cent EDP programme and later increase to 10 per cent.

17. Futures trading of sugar in various commodity exchanges has been effective to reduce price volatility to some extent. As per NCDEX, the annual average price volatility has been reduced from pre futures volatility of 10.44 percent to 9.51 percent. There are certain distinct advantages realized from futures trading of sugar, such as alignment of domestic price in line with international price, reduction of volatility in spot prices, imparting price signal to the farmers to decide on acreage etc. Futures trading of sugar is a fair and neutral method of price discovery by which all the respective stakeholders adjust their production system corresponding to the price signal. The past two years experience shows that the NCDEX constantly updates its functioning, making it more neutral and objective. The Commission believes that futures price will play a positive role in sugar sector, in the time to come.

18. Private sugar factories have access to cheaper source of funds like IPO, ECB and right issue etc. These avenues, however, are not available to cooperative sugar factories. The Commission feels that cooperative sugar mills can not compete with the private mills unless they stand on financially sound footing. In order to ensure that they are eligible for investible funds available in the market, the Commission recommends that ***the Government should carry out necessary amendments to the Co-operative Act to enable the co-operative sugar mills to have access to IPO, External Commercial Borrowings and Right Issues etc, on par with the sugar mills in private sector.***

19. The cost on account of human labour constitutes a major part of the total variable input cost in sugarcane. As per information available from Labour Bureau, between April 2005 and March 2006 the actual wage rates for agricultural labourers have increased in most of the sugarcane growing states. While the increases are in the range of 1-9 per cent in the states of Andhra Pradesh, Haryana, Karnataka, Maharashtra and Uttar Pradesh, there is a decline of 2 to 3 per cent in the states of Punjab and Tamil Nadu. The prices of farm inputs, between July 2005 and June 2006, as indicated by Wholesale Price Index are observed to have increased by about 1 per cent for fertilizers and 4 per cent for pesticides. The prices of petro-based inputs like high speed diesel (HSD), light diesel oil (LDO) and lubricants have registered an increase of 12.4 per cent, 12.3 per cent and 25.3 per cent respectively over the previous year.

(Tables 8 & 9)

20. After the submission of the Commission's last report on price policy for sugarcane for 2006-7, fresh estimates of cost of cultivation/production of sugarcane generated under the Comprehensive Scheme (CS) by the Directorate of Economics & Statistics pertaining to the year 2004-05 are available for the major growing states of Andhra Pradesh, Haryana, Karnataka, Maharashtra, Tamil Nadu, Uttar Pradesh and Uttaranchal. Between 2003-04 and 2004-05, the estimates of cost of cultivation of sugarcane as measured by A_2+FL and C_2 have increased for all the states except Haryana which has registered a decline during this period. The increase in the C_2 cost of cultivation is about 17 per cent for Uttaranchal, 24 per cent for Andhra Pradesh, 19 per cent for Maharashtra, 24 per cent for Uttar Pradesh and 09 per cent for Tamil Nadu. In Karnataka and Haryana both, the C_2 cost of cultivation has decreased by about 2 per cent. The average yield of sugarcane per hectare in respect of sampled units of CS has increased by 2 per cent in Karnataka, 1.6 per cent for Haryana, 2 per cent for Karnataka, 27 per cent for Maharashtra, 1 per cent for Tamil Nadu, 8 per cent

for Uttar Pradesh between 2003-04 and 2004-05. However, there is a 15 per cent decrease in the cane yield in Uttaranchal during the same period.

21. The estimates of cost of production of sugarcane of various states have been projected for the ensuing season on the basis of the same methodology adopted by the Commission in the past few years. A variable input price index has been constructed for each state covered by the Comprehensive Scheme on the basis of the actual input price movements observed so far. As per the present practice, the cost estimates pertaining to the latest three years are projected and then the averages of the projected costs are considered. Thus, the C₂ cost of production of sugarcane for 2007-08 is projected to an average of Rs.82.53, Rs.80.85, Rs.70.68, Rs.82.74, Rs.72.39 and Rs.73.93 per quintal respectively for Andhra Pradesh, Haryana, Karnataka, Maharashtra, Tamil Nadu and Uttar Pradesh. The weighted average C₂ cost of production on the basis of production weights for TE 2004-05 then works out to Rs.75.59 per quintal for 2007-08.

(Tables 12 & 13)

22. When adjusted to 9 per cent recovery rate using state specific average recovery rates for the TE 2004-05 for all the states, the C₂ costs of production for 2007-08 work out to Rs.71.90, Rs.71.76, Rs.60.12, Rs.67.70, Rs.67.30, and Rs.68.52 per quintal respectively for these states. On this basis, the weighted average C₂ cost of production adjusted for 9 per cent recovery is projected at Rs.67.83 per quintal.

23. Some State Governments also provided estimates of cost of production/cultivation based on their own surveys. These data are examined at length and compared with the corresponding CS data and also with the subsequent projection made on the basis of this data by the Commission for the ensuing season (2006-07). This data provided by the states are found to be

useful in many ways. Andhra Pradesh , Gujarat and Tamil Nadu have provided estimates of cost of production of sugarcane for 2005-06, while Maharashtra, Haryana and Punjab have provided the cost projections for 2007-8. Tamil Nadu has estimated the cost of production at Rs.59.66 per quintal for 2004-05 which is also inclusive of the transportation cost. After making necessary adjustments, the cost of production for Tamil Nadu works out to Rs.55.70. As against this, the CS estimate for the year 2004-05 for the state is Rs 68.81 per quintal and the Commission's projection for the state for the ensuing season is Rs.72.39 per quintal. Haryana , Maharashtra and Punjab have provided cost projections for 2007-08. The cost projected at Rs. 110 per quintal by Haryana is higher than that projected by CACP. Haryana has included additional costs on account of management and transportation charges. After making necessary adjustments, the cost projection works out to be Rs. 95.45 per quintal for the state. This adjusted cost is higher than CACP's projection due higher charges on account of inputs and a lower yield considered by the state. In the case of Maharashtra, the cost projected by the state is Rs. 112.77 per quintal which is inclusive of 15 percent profit to the farmers, transport, market and supervision charges. After adjustment, this works out to Rs 76.32 per quintal. As against this, Commission's projection for the state works to Rs 82.74 per quintal for 2007-08 season.

(Table 14)

24. While fixing the SMP, the cost of transportation is to be added to the total cost of production. After examining the transportation charges for sugarcane by various modes of transportation received from states, the all India average transportation cost for the year 2007-08 works out to Rs.13.33 per quintal approximately.

25. Thus, considering all the relevant factors, namely costs of production, demand-supply situation of both sugarcane and sugar, trends in market prices of sugar in domestic as well as international markets, and having regards for the factors mentioned in Clause 3 (1) of the Sugarcane Control Order, 1966 and the

need to encourage sugar industry to reach out to international market on sustainable basis, especially in the wake of diminution of European Union, the Commission recommends that ***the Statutory Minimum Price (SMP) of sugarcane payable by sugar factories for 2007-08 sugar season be fixed at Rs. 81.18 per quintal for a basic recovery rate of 9 per cent subject to a premium of Rs. 0.90 for every 0.1 percentage point increase in the recovery above that level. At the All-India average recovery rate of 10.2 per cent achieved in 2004-05 season, the SMP recommended comes to Rs. 92.00 per quintal.***

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