

COMMISSION FOR AGRICULTURAL COSTS AND PRICES

Report on Price Policy for Sugarcane for the 2008-09 Sugar Season

In this report, the Commission for Agricultural Costs and Prices presents its views on the price policy for sugarcane for 2008-09 sugar season. The Commission recommends that:

- (i) *the Statutory Minimum Price (SMP) of sugarcane payable by sugar factories for 2008-09 sugar season be fixed at Rs.81.18 per quintal for a basic recovery rate of 9 percent subject to a premium of Rupee 0.90 for every 0.1 percentage point increase in the recovery above that level. At the All-India average recovery rate of 10.22 per cent achieved in 2005-06 season, the SMP recommended comes to Rs.92.00 per quintal.*** (Para 35)
- (ii) *Government should announce the SMP invariably before the start of the sowing season, which will give the timely price signal to sugarcane growers and also help them decide to allocate area under sugarcane vis-à-vis other crops.*** (Para 2)
- (iii) *Central Government should persuade the State Governments not to fix State Advised Prices (SAP) in an arbitrary manner, as it results in market distortions and acts against the spirit of much desired market integration at the national and international levels.*** (Para 3)
- (iv) *Government should avoid ad-hocism in sugar export policy and formulate a long term strategy for promoting the export of sugar on a sustainable basis.*** (Para 19)

(v) Government should make necessary arrangements to ensure the timely payments of cane price to farmers by the sugar mills.

(Para 21)

(vi) Government should declare the 'L' factor in time, as delay in this respect causes disappointment and disincentive to sugarcane growers.

(Para 23)

(vii) Government should provide necessary incentives to all sugar mills to produce ethanol, alcohol, co-generation of power, etc. along with sugar, in a flexible manner and also permit any new sugar units to be set up only if they plan to do so. This is essential for the viability and long term sustainability of sugar industry as well as sugarcane farming.

(Para 24)

(viii) Government of India should adopt a policy of blending at least 10 percent ethanol with petrol mandatory after due consultations with stakeholders.

(Para 25)

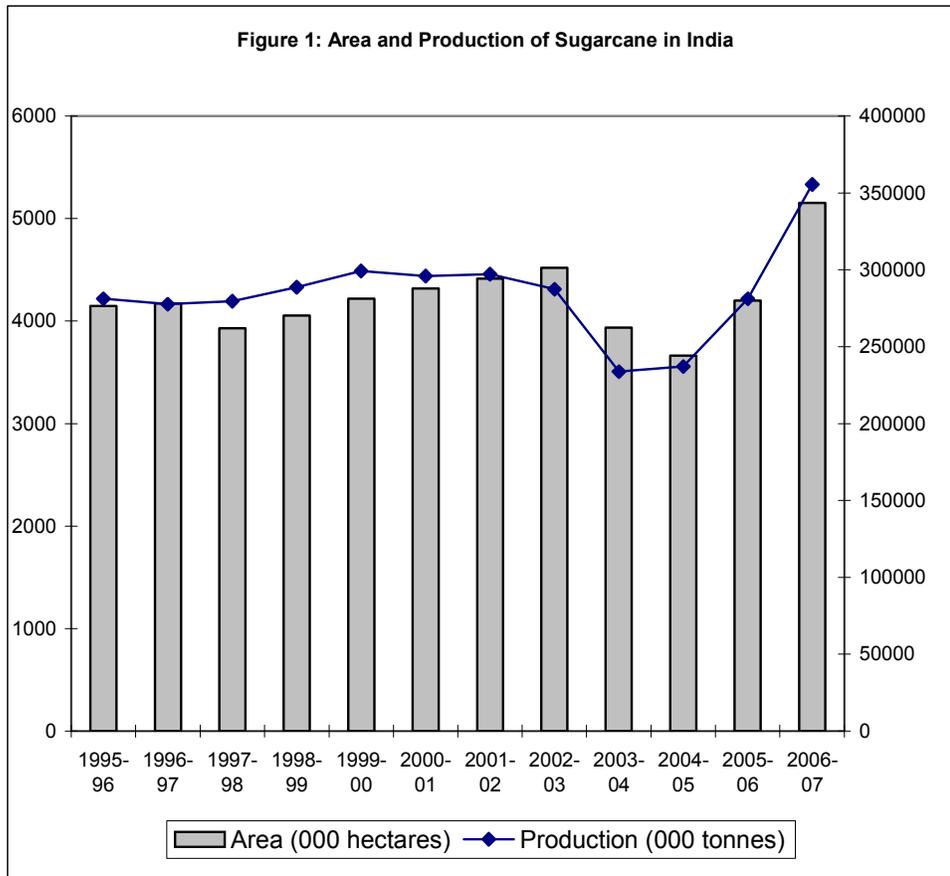
(ix) Government should carry out necessary amendments in the Co-operative Act to enable the co-operative sugar mills to have access to IPO, External Commercial Borrowings, Right Issues, etc, on par with the sugar mills in private sector.

(Para 28)

2. The Commission submitted its report on price policy for sugarcane for 2007-08 sugar season on 28th July, 2006, recommending the Statutory Minimum Price (SMP) of Rs 81.18 per quintal linked to a basic recovery rate of 9 percent subject to a premium of Rs 0.90 for every 0.1 percentage point increase in the recovery above that level. However, the Government has declared the SMP for 2007-08 season only on 21-12-2006. The Commission recommends that **Government should announce the SMP invariably before the start of the sowing season, which will give the timely price signal to sugarcane growers and also help them decide to allocate area under sugarcane vis-à-vis other crops.**

3. Area and production of sugarcane fluctuate widely from year to year, mainly due to variation in price and weather factors. Even though the Government of India fixes the Statutory Minimum Price (SMP) of sugarcane for the country as a whole, several state governments fix State Advised Prices (SAP) which are generally higher than the SMP. But sugar mills especially in years of low sugar prices in the markets, fail to pay state advised prices and as a result, arrears of payment get accumulated. Conversely, when market prices of sugar are high, sugar mills tend to purchase more and more cane at high prices. In fact, supply response to changes in the prices is quite substantial and consequently, cane production follows a cobweb pattern, thereby putting both sugar mills and sugar cane growers in distress at times. Any way the Commission has been arguing from time to time that SAPs are often fixed arbitrarily by some state governments and result in market distortion. Therefore, the Commission once again recommends that the **Central Government should persuade the State Governments not to fix State Advised Prices (SAP) in an arbitrary manner, as it results in market distortions and acts against the spirit of much desired market integration at the national and international levels.**

4. Area under sugarcane in the country showed a steady upward trend from 1997-98 to 2002-03. It increased from 3.93 million hectares in 1997-98 to 4.52 million hectares in 2002-03, but decreased gradually to 3.66 million hectares in 2004-05. In 2005-06 and 2006-07, area under sugarcane rose to 4.20 million hectares and 4.86 million hectares respectively. Similarly, the production of sugarcane increased from 279.54 million tonnes in 1997-98 to 297.21 million tonnes in 2001-02, but declined to 233.86 million tonnes in 2003-04 and increased to 237.09 million tonnes in 2004-05 and 345.31 million tonnes in 2006-07 (Directorate of Economics & Statistics). The yield of sugarcane also fluctuated from year to year. During 1997-98 to 1999-2000, it averaged about 700 quintals per hectare per year, but it was as low as 636 quintals per hectare in 2002-03 and 594 quintals per hectare in 2003-04. However, in 2006-07, it rose again above 711 quintals per hectare. Figure – 1 shows the changes in area and production of sugarcane in the country during the past one decade or so.



5. For the sugar season 2007-08, it is too early to estimate sugar production. However, on a conservative estimate, the production of sugar may be placed at 280 lakh tonnes. On the assumption that there would be no imports of sugar and the carry over stock estimated at 105 lakh tonnes, the total availability of sugar is placed at around 385 lakh tonnes. As indicated by Indian Sugar Mills Association (ISMA), the consumption of sugar in 2007-08 is expected to be 200 lakh tonnes and export of 15 lakh tonnes. Thus, estimated closing stocks of sugar by the end of sugar season 2007-08 is likely to be around 170 lakh tonnes, which is sufficient to meet two-third requirement of the next sugar season, 2008-09. The whole scenario suggests that the sugar season 2007-08 would experience excess supply of sugar, which would further depress the market sentiments by giving declining price trends. The balance sheet of sugar for the past five years is presented below:

Table 1 : Balance sheet of sugar

(In lakh tonnes)

Sl No	Particulars	2003-2004 Sugar Year (Oct-Sept)	2004-2005 Sugar Year (P)	2005-2006 Sugar Year (P)	2006-2007 Sugar Year (E)	2007-2008 Sugar Year (E)
1	Carry over stocks from previous season	116.16	85.00	40.00*	39.02	104.97
2	Production of sugar	139.58	130.00	191.00	273.96\$	280.00
3	Import of sugar	5.53	20.74	6.70	0.01	-
4	Total Availability (1 + 2+3)	261.27	235.74	237.70	312.99	384.97
5	Internal Consumption	175.00	171.44	185.00	195.00	200.00#
6	Exports	2.94	0.98	13.68	13.02	15.00#
7	Closing stocks at the end of season	83.33	63.32	39.02	104.97	169.97

* Stock position excluding damages/wastages

\$ As on 15-06-2007

Estimated by ISMA

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

6. The global sugar production for 2006-07 was estimated at 159.2 million tonnes, 7.3 million tonnes (4.8 percent) more than the production of 2005-06. The sugar output in developing countries for 2006-07 is estimated to grow by 9.1 percent, whereas developed countries output was forecast to decline by 6.3 percent over the previous year. Estimated production in Asia in 2006-07 stands at 58.4 million tonnes, nearly 17 percent increase over the previous year. The world production of sugar for 2007-08 is estimated at 162 million tonnes. The FAO estimates of world sugar consumption in 2006-07 was 152.3 million tonnes (raw value), representing a 2.3 percent increase over 2005-06. Similarly, the sugar utilization in Developing Countries is estimated at 104.1 million tonnes, an absolute increase of 3.3 million tonnes or 3.3 per cent from the previous year's estimate of 100.8 million tonnes (table 2 below). Nevertheless, currently the supply outstrips demand at the global level which is a cause for concern.

Table 2: World production and consumption of sugar (million tonnes, raw value)

Year	Production		Consumption	
	2005-06	2006-07	2005-06	2006-07
World	151.9	159.2	148.9	152.3
Developing Countries	109.0	118.9	100.8	104.1
Developed Countries	43.0	40.3	48.1	48.2
Asia	50.0	58.4	65.9	67.8
Africa	9.9	10.5	14.6	15.3
Latin America and the Caribbean	52.0	53.0	26.4	26.9
North America	6.6	7.6	10.8	10.8
Europe	26.8	24.1	29.7	29.8
Oceania	6.6	5.6	1.5	1.6

Figures for 2005-06 Estimated and 2006-07 Forecast
Source: Table 9: Food Outlook, June 2007, FAO

7. As the production level is more than the consumption level, world raw sugar prices exhibited a downward movement from mid-2006. The International Sugar Agreement (ISA) daily price for raw sugar averaged US\$ 9.72 in April, 2007, which was the lowest level since July, 2005. Major factors behind the steady decline in prices include much larger than anticipated crops in Brazil, China, Cuba, Guatemala, India, Pakistan, Thailand and Vietnam. The export incentives for white sugar announced recently by the Government of India has resulted in further downward pressure in world refined sugar prices. The increase in demand for ethanol triggered by the steep increase in price of crude oil has not made a significant dent on sugar prices due to excess cane production.

8. The month-end wholesale prices of sugar in different up markets in India indicate that the average wholesale price of sugar per quintal that was quoted

between Rs.1779 (Jalandar) to Rs.1860 (Kolkata) in 2004-05 scaled up to Rs.1948 (Jalandar) to Rs.1990 (Kolkata) in 2005-06, but declined to Rs.1694 (Jalandar) to Rs.1475 (Chennai) in October 2006 - July 2007. 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 2005-06 and the WPI of sugar stood at 157.9 and 169.3 respectively. During 2006-07, the sugar prices continued its decreasing trend up to May, 2006 when the WPI was 173.3 and thereafter it moved downward to 144.8 in May, 2007. The average WPI of sugar declined by 8.2 percent from 169.3 in 2005-06 to 155.4 in 2006-07 (Upto May, 2007). The WPI of sugar declined by more than 16 percent from May, 2006 to May, 2007. (Table 6)

9. The sugar industry in the country is currently passing through a crisis characterized by surplus production, falling prices, and accumulation of stock. The sugar industry has indicated that the present low sugar price has gone below the levy sugar price notified by the Government of India. With the deteriorating financial position of sugar mills, the possibility of SMP arrears mounting up is almost a distinct possibility. To ensure that over-production of sugar does not lead to a situation of mounting sugarcane payment arrears, the Central Government has taken the following steps:

a) Creation of a total buffer stock of 50 lakh tonnes for the period upto 31.07.2008. The buffer subsidy and additional credit offered in this regard are to be exclusively used for the payment of cane price arrears.

b) Providing export assistance to defray the cost of internal transport and freight charges, marketing and handling charges and ocean freight disadvantage at the flat rate of Rs. 1350 per tonne on export of domestically manufactured sugar from sugar factories situated in the coastal States and at the flat rate of Rs. 1450 per tonne for sugar factories located in non-coastal States. This export assistance is to be used for payment of cane price arrears.

c) Allowing sugar exports under Open General License (OGL) without any ceiling.

10. The observation is gaining ground that the Government should explore options for disposal of surplus sugar stocks, instead of creating buffer stocks by providing incentives. An option that has been put forward by the sugar industry is that the Government could consider building up a strategic stock concept like the one introduced by the Government of China in 2002. With this arrangement, the Government can purchase and stock sugar when prices decline and auction it when prices look up. This suggestion merits consideration by the Government. It should also be mandatory that the concerned agencies lift the levy stocks of sugar in time. For any delay in this regard, the cost/liability for the period of retention of stock has to be borne by the Government or its concerned agencies. Undue delay by the Governmental agencies should not tell upon the financial position of sugar mills.

11. As a conditionality to the decontrol of sugar, Futures trading in sugar has been permitted under Section 15 of the Forward Contracts (Regulation) Act, 1952 since 14th May, 2001. Futures trading commenced for the first time on 6th February, 2003 at the National Commodity Exchange, Ahmedabad. Presently, following five Commodity Exchanges have been recognized for futures trading in sugar:

1. National Multi-Commodity Exchange of India Ltd. (NMCE), Ahmedabad,
2. National Commodity and Derivatives Exchange Ltd., (NCDEX), Mumbai,
3. Multi Commodity Exchange of India Ltd. (MCX), Mumbai,
4. E-Sugar India, Mumbai, and
5. E-Commodities, Delhi.

Sugar is mainly traded on the platform of NCDEX, which accounted for 96 percent of total volume of futures trading during 2005-06, 90 percent during 2006-07 and 99 percent during the current financial year 2007-08 upto May, 2007. 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 stakeholders

involved adjust their production system corresponding to the price signal. The futures price of sugar continues to show a depressing picture.

12. Import of sugar was placed under Open General Licence (OGL) since 1994. The OGL facility came along with zero duty and the item continued to attract zero duty till April, 1998. Thereafter, the Government imposed a basic customs duty of 5% and a countervailing duty of Rs. 850.00 per tonne with effect from 28.4.1998. This basic custom duty got increased from 5% to 20% in January, 1999, to 25 percent with surcharge of 10 percent in the year 1999-2000, to 40 percent in December, 1999, and 60 percent in February, 2000. The countervailing duty of Rs. 850/- per tonne imposed in 1998 is still continuing. The basic customs duty of 60 percent alongwith the countervailing duty of Rs.850/- per tonne, seems adequate to safeguard the interests of domestic sugar sector against any threat from possible import surges.

13. As regards sugar export, during the years 1998-99 to 2002-03, the sector was producing sugar in surplus vis-à-vis the consumption requirements and the stocks of sugar with sugar factories began to pile up. As a way out of the situation, the Government encouraged export of sugar through various WTO compatible incentives which imparted a boost to the export of sugar from the country. Export of sugar increased from 13 thousand tonnes in 1999-2000 to 16.62 lakh tonnes in 2002-03, but registered a decline to 12 lakh tonnes in the next year. The Government decided to withdraw the incentives in June, 2004 when the sugar stocks drastically got decreased due to fall in sugar production in 2003-04 season. Thereafter, the export steeply came down to 1.09 lakh tonnes in 2004-05, followed by a marginal improvement to 3.21 lakh tonnes in 2005-06. During 2006-07 upto December, 2006, 11.42 lakh tonnes of sugar have been exported. (Table 5)

14. In the meantime, there was a major development internationally, as the WTO award prevented dumping of subsidized 5 million tonnes of sugar from the EU into the world market annually. This pushed up world sugar prices and Indian exporters were able to sell sugar at a price higher than the domestic price. When the export was really looking up, the Government of India issued a notification in July, 2006

imposing ban on export of sugar including exports under ALS obligation. With this rather hasty decision, the booming export market for the country was brought to an abrupt end. The decision was prompted by the perceived increase in sugar prices causing an inflationary impact in the economy. However, the later developments in the sector indicated that this abrupt ban on sugar exports threw the sugar economy into a crisis situation. The international prices of sugar were ruling high at around \$500 per tonne f.o.b. at that time and the industry expected to capture a major chunk of the world sugar export market and reap profits. Besides, there was accumulation of sugar stocks indigenously and crash in prices which reportedly even dipped below the levy sugar price levels. The sugar mills also felt discouragement for fresh crushing. On the whole, the import/export policies in respect of the sugar sector seem to have been divorced from the demand-supply dynamics of the sector.

15. Perceiving that the encouragement for export was not adequate, many State Governments announced incentives to bail out their sugar factories. These were expected to arrest the trend of declining prices. However, the prevailing international market situation of sugar has belied the Governmental hopes. Owing to global surplus production of sugarcane and sugar, the international market for Indian sugar has shrunk and the prices nose-dived. The rupee also gained strength against the dollar, further hitting sugar exports. As a result, export has become a losing proposition. Keeping in view the emerging developments, and the estimated higher production of sugar in 2006-07 sugar season, the Government vide notification dated 4th January, 2007 relaxed the ban on export of sugar and allowed exports against advance licences. The Government has now further relaxed the ban and has allowed export of sugar under OGL, vide notification dated 23rd January, 2007.

16. Another problem constraining India's sugar exports is that Indian sugar factories produce very little refined sugar. They produce plantation white sugar which fetches adequate market in India, but has limited international market. The market for plantation white sugar has shrunk due to setting up of large capacity of sugar refineries in countries like Bangladesh, Indonesia, Middle East, etc. The sugar industry in India is clamouring for export of raw sugar instead of white sugar alone. There seems to be merit in this demand, and the country should cash in on the healthy demand for raw sugar in South-East Asia and the Middle-East, where

companies are setting up sugar industries. Guided by the trend of the times, sugar factories should be encouraged to adopt a proper product mix of raw and refined sugar. For this, the Commission had earlier indicated the need for providing the requisite technical and policy support coupled with fiscal incentives in the shape of differential excise duty on production of raw and refined sugar, so as to make India's sugar exports sustainable in future. It is reiterated that the Government should take decisions on these recommendations without any further delay.

17. Higher cost of production, inferior quality, competition with highly subsidized sugar in international market, etc., are barriers before India's exports of sugar. An important reason adduced by the sugar mills for the cost in-effectiveness of India's sugar exports is the high sugarcane prices that they have to pay vis-à-vis their counterparts in other major sugar exporting countries, like Brazil and Thailand. While the instances of Brazil and Thailand may not be replicable in the Indian context, earnest efforts are warranted to bring down the costs of sugarcane and sugar production, to eliminate the price disadvantages. It is imperative for the Indian sugar industry to improve its cost efficiency to successfully sustain its presence in the international market and accordingly, the economies of scale are becoming increasingly important. The sugar factories in other leading sugar producing countries, are operating in the capacity range of 10000 to 30000 TCD, while in India the average capacity is around 3500 TCD. The production capacity needs to be increased substantially, to become viable and improve export prospects in the overseas markets. Majority of the Indian sugar factories are also in urgent need of modernization and upgradation, which would improve recovery and reduce cost of production. Government, therefore, should provide the requisite incentives/disincentives to the factories to modernize the outdated machineries and technology.

18. Further, it is required that the mills should produce sugar of the quality at par with that in the competing countries. Quite often, the overseas buyers offer prices less than the prevailing market price to the Indian sugar exporters. The main reason for the low price is stated to be that the Indian white sugar have 100 -150 ICUMSA, while internationally it is 45 ICUMSA. An ICUMSA (International Commission for Uniform Method of Sugar Analysis) rating is an international unit for expressing the

purity of sugar -- less the ICUMSA, better is the quality. The sugar produced in India is not reportedly conforming to the quality required by importing countries. The sugar factories should modernize their units and produce quality sugar conforming to the ICUMSA Norms of importing countries, to facilitate export of sugar.

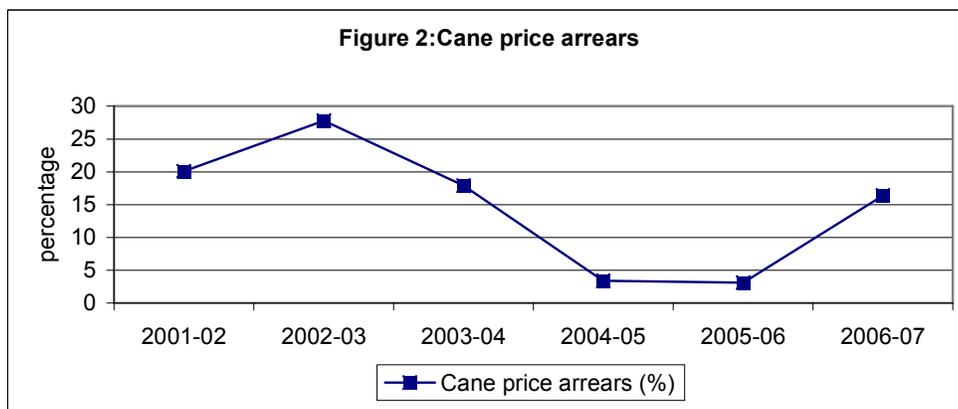
19. Ad-hocism and not a consistent policy has remained as the major characteristic of India's approach towards sugar export. The Government used to give export incentives to liquidate excess stocks of sugar and withdraw them when stocks position normalized. A long term export policy must be put in place, to allow Indian sugar industry to compete in the world market. For sustained presence in the overseas markets, long-term relationship with the foreign buyers are required. Therefore, it is recommended that the **Government should avoid ad-hocism in sugar export policy and formulate a long term strategy for promoting the export of sugar on a sustainable basis.**

20. The Statutory Minimum Price (SMP) of sugarcane is linked to the recovery rate. The sugarcane growers falling under the coverage of sugar factories offering high recovery get higher SMP and vice versa. Since the level of recovery is substantially influenced by the efficiency of plant and machinery operating in the sugar factories, there is an imperative need for encouraging the sugar factories to improve the operational efficiency of their plant and machinery and in the process elevate their recovery rates so that sugarcane growers get higher cane price. The prolonged period of crushing adopted by some sugar mills results in loss in sugar recovery which affects the cane growers but benefits the millers through lower SMP. While reckoning the recovery rates for arriving at SMP, an extent of adjustment may be granted for the loss because of longer period of crushing. It has also been brought to the notice of the Commission that the full harvesting charges prescribed by the State Governments should be included in the SMP. This deserves consideration so that the SMP would be more inclusive and better reflective of the reality.

21. There are stipulations in the Sugarcane (Control) Order, 1966 for payment of cane price within 14 days of the delivery of sugarcane to the factory. Any failure in this regard could attract penal interest at the rate of 15 percent per annum. The

cane price arrears and interest thereof are recoverable as arrears of land revenue. However, despite all these provisions and the State Governments as the delegated enforcers, the problem of cane price arrears still persists and acquires greater dimensions during the seasons of high sugar production. The cane price arrears that was 27.8 percent in 2002-03, substantially declined to 3.1 percent in 2005-06, but again surged to 16.4 percent in 2006-07. The Commission recommends that **Government should make necessary arrangements to ensure the timely payments of cane price to farmers by the sugar mills.**

(Table 3) (Figure 2).



22. Keeping in view the divergent market dynamics pertaining to sugarcane and sugar prices, it has been suggested by the mill owners that the cane price should be linked to the price realized from sale of sugar. As sugarcane constitutes around 70% of the cost of producing sugar, such linkage seems to be fair and logical. Moreover, in the Indian context, sugar is the primary product out of sugarcane vis-à-vis the production of other by-products such as gur, khandsari, ethanol, etc. As in the domestic and international market sugar price fluctuates frequently and the other by-products are not prominently produced and used in the country; price of sugarcane becomes significant for determining the viability of the sugar industry. Accordingly, the SMP of sugarcane may be fixed in a flexible manner both upward and downward, keeping in view the overall health of the sugar economy.

23. The Sugarcane (Control) Order, 1966, not only provides for giving to the farmers the SMP of sugarcane but also the additional cane price (ACP) under clause

5A of the Order. Their entitlement is 50 percent of the extra realizations made by sugar factories over and above the statutory minimum price. This is governed by the formula, $(R-L)/2$, where 'R' is realization made by sugar factories from the sale of levy and free sale sugar and 'L' is the unit cost of sugar production. The 'L' factor is declared, zone-wise, by the Directorate of Sugar, Government of India. Considering the 'L' factor and the account position of sugar factories, the State Governments arrive at the liability of each sugar factory to pay the ACP. Unfortunately, there is undue delay in the announcement of 'L' factor by the Directorate of Sugar. The Commission reiterates its earlier recommendation that the **Government should declare the 'L' factor in time, as delay in this respect causes disappointment and disincentive to sugarcane growers.** The subsequent required actions by the State Governments, such as determining the additional liability of cane price and notifying the same must also be made time-bound. The increased use of IT applications, particularly computer link-up between the Directorate of Sugar and the State Sugar Commissioners, could enable the timely computation of 'L' factor.

24. Sugarcane is a multipurpose crop, which can be used for preparation of ethanol alcohol co-generation of power, and organic manure, besides production of sugar. Excess production of cane beyond the demand for sugar production can be easily diverted for production of ethanol and other by-products including cogeneration of power by transforming the existing sugar mills into integrated complexes or setting up such new units. The sugar industry has to look beyond sugar if it has to survive during years of higher production. In the present scenario, stand-alone sugar mills are not viable and therefore, the Commission recommends that **Government should provide necessary incentives to all sugar mills to produce ethanol, alcohol, co-generation of power, etc. along with sugar, in a flexible manner and also permit any new sugar units to be set up only if they plan to do so. This is essential for the viability and long term sustainability of sugar industry as well as sugarcane farming.**

25. With abundant cane production, there has been remarkable growth in the production of molasses, the basic raw material for production of ethanol. In a recent meeting of the Expert Group on bio-fuel policy, the Planning Commission has suggested 10 percent use of ethanol on an all India basis from July, 2007 as against

the use of 5 percent blends announced by the Government in October, 2006. The ethanol required for 10 percent blending with petrol can easily be made out of the existing available molasses and if required, it can be produced directly from sugarcane juice, which, in turn, would be an additional enabler for adjusting sugar production keeping in view the sugar price in domestic and international market. Besides increased use of ethanol for blended petrol would reduce dependence on import of crude oil and save precious foreign exchange. Brazil has a long experience of about 25 years, producing ethanol and alcohol from sugarcane and in the course of time have attained economies of scale and reduced cost per unit to one-fourth. Brazil and USA have adopted a policy of 20 percent doping ethanol with petrol for the last several years. The Commission recommends that ***Government of India should adopt a policy of blending at least 10 percent ethanol with petrol mandatory after due consultations with stakeholders.***

26. The programme of ethanol blended petrol (EBP) could not take off because of the heavy and divergent duties/taxes imposed on sale of ethanol by different State Governments. This hampered the inter-State movement of ethanol making it cost prohibitive. For the EBP to take off as envisaged, there is a need to restrict the powers of States to impose taxes arbitrarily. Pricing of ethanol is another major issue between the oil companies and the sugar industry, still awaiting resolution. The price of ethanol declared by the Government of India is not remunerative, and is discouraging the sugar factories from ethanol production. Unless the minimum floor price for the procurement of ethanol and minimum guaranteed offtake of ethanol is fixed, the sugar mills may not be enthused to go in for huge investment for setting up distilleries and ethanol plants. The price of ethanol should be linked with the price of petrol to make it remunerative for the sugar mills. Therefore, there is need for a long term policy regarding procurement of ethanol at reasonable prices.

27. Co-generation is a cost-effective, renewable and eco-friendly source of energy and sugarcane is the most energy efficient crop. As per Government's announcement, 10% of energy plan is to be generated by renewable source by the year 2012. It is estimated that about 5000 MW of power could be generated from existing 553 sugar mills through optimum co-generation. The potential for bagasse co-generation lies mainly in the nine sugar producing States, with the maximum

potential of about 1250 MW each in the States of Maharashtra and U.P. Presently 74 co-generation projects of 615 MW capacity (surplus power) have already been commissioned in seven states and 104 projects aggregating to 1212 MW are under construction. As per Government policy introduced in September, 2005, co-generation projects can avail the benefit of concessional custom and excise duty exemptions. In addition, fiscal incentives are provided by the Central Government, such as 80 percent accelerated depreciation allowance and income tax holiday for 10 years. The guidelines were issued to States to announce policies for buy-back wheeling, banking, third party sale of power for co-generation projects.

28. Assuming surplus power generation during difficult crushing period ranging from 180 to 210 days in a year and choice of an optimum technology package, the unit cost of generation at present is about Rs. 2.75 per unit. These capital costs and cost of generation compare quite favourably with cost for new conventional power projects which is around Rs.4 to 5 crore/MW and Rs 2.25 to 3.5 per kwh, depending upon the location, size and choice of mill. The costs of co-generation projects can be brought down further by higher production volumes and higher Plant Load Factor (PLF) achieved through longer availability of bagasse. The co-generation of power is equipped with most of the sugar mills in private sector while it lacks in cooperative and public sector units which constitute about 60 percent of the total sugar mills. The problem of not taking up co-generation of power by these units relates to non-availability of adequate finance and institutional systems, while the private sector units have access to cheaper source of funds like Initial Public Offering (IPO), External Commercial Borrowing (ECB) and Right Issues. In order to ensure that cooperative sector is eligible for tapping investible funds available in the market, the Commission recommends that the **Government should carry out necessary amendments in the Co-operative Act to enable the co-operative sugar mills to have access to IPO, External Commercial Borrowings, Right Issues, etc, on par with the sugar mills in private sector.**

29. The Statutory Minimum Price of sugarcane is currently linked to a basic recovery of 9 percent. In fact, it has increased from 8.5 to 9 percent with effect from 2005-06. While the sugarcane growers generally feel that this has affected them adversely, the Indian Sugar Mills Association, argues that the average recovery of

most sugar factories are 9.5 percent and above and therefore, the SMP should be linked to a basic recovery of 9.5 percent and not 9 percent. Anyway, the current All India average recovery is above 10 percent. However, the government has to take a final view on this, while fixing the SMP for the year 2008-09.

30. Cost of production is one of the important considerations in the determination of Statutory Minimum Price of sugarcane. 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 to 9 percent in the states of Andhra Pradesh, Haryana, Karnataka, Maharashtra and Uttar Pradesh, there is a decline of 2 to 3 percent 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 percent for fertilizers and 4 percent 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 percent, 12.3 percent and 25.3 percent, respectively over the previous year.

(Tables 8 & 9)

31. Fresh estimates of cost of cultivation / cost of production for sugarcane generated under the Comprehensive Scheme (CS) of the Directorate of Economics & Statistics for the year 2005-06 have now been available for the major growing states of Andhra Pradesh, Haryana, Maharashtra, Uttar Pradesh and Uttarakhand since the last report on price policy for sugarcane for 2007-08 submitted by the Commission. It is remarkable that like in the previous year of 2004-05, the CS estimates of Cost of Cultivation of sugarcane, as given by $A_2 + FL$ and C_2 have shown an increase in all states for the period between 2004-05 and 2005-06. C_2 cost of cultivation during the period 2004-05 and 2005-06 in major sugarcane growing states recorded an increase that varied between the maximum of 27 per cent in the case of Andhra Pradesh and minimum of 5 per cent in the case of Uttarakhand. Other states have also registered an increase in C_2 cost of cultivation in the range of 5 to 27 per cent, with Haryana showing an increase of 12 per cent, Maharashtra showing an increase of 18 per cent, Tamil Nadu showing an increase of

20 per cent, Uttar Pradesh showing an increase of 15 per cent. There has been an experience of slump in yield rates of sugarcane during the period of 2004-05 and 2005-06 in respect of states such as Haryana, Maharashtra and Uttarakhand.

32. The estimates of cost of cultivation of sugarcane have been projected for the ensuing season based on the prevalent methodology being followed by the Commission for quite some time now. The projected cost of production has been derived from the state specific variable input index on the basis of movements in input prices captured through Wholesale Price Index (WPI) released by the Office of Economic Adviser, Ministry of Commerce and Industry, wage rates for agricultural labourers compiled by Labour Bureau, Ministry of Labour & Employment, and information furnished by the state governments. In keeping with the current practice, the cost estimates of the latest available three years are projected state-wise. On the basis of trends observed in state specific input price indices, it is evident that variable input cost index during the period between 2005-06 and 2008-09 is estimated to increase in all likelihood by about 24 per cent for Andhra Pradesh, 11 per cent for Maharashtra, 10 per cent for Uttar Pradesh, and it is likely to increase by about 12 per cent each for Haryana, Karnataka, Tamil Nadu and Uttarakhand. Accordingly, the C₂ cost of production of sugarcane in respect of various states for the year 2008-09 is projected to an average of Rs.92.76 per quintal for Andhra Pradesh, Rs.90.97 per quintal for Haryana, Rs.73.31 for Karnataka, Rs.91.51 per quintal for Maharashtra, Rs.76.97 per quintal for Tamil Nadu, Rs.67.96 per quintal for Uttar Pradesh and Rs.58.74 per quintal for Uttarakhand. The projected C₂ cost of production at all India level works out to Rs.75.86 per quintal. This figure is arrived at by taking the weighted average of state specific projected costs of production with weights being their respective production for the T.E. 2006-07 (Table 12). When adjusted for 9 per cent recovery rate, using state specific average recovery rates for the T.E. 2006-07, the C₂ cost of production for 2008-09 works out to Rs.82.20 per quintal for Andhra Pradesh, Rs.82.64 per quintal for Haryana, Rs.63.62 for Karnataka, Rs.71.41 per quintal for Maharashtra, Rs.73.07 per quintal for Tamil Nadu, Rs.63.69 per quintal for Uttar Pradesh and Rs.55.43 per quintal for Uttarakhand. On this basis, the adjusted weighted average C₂ cost of production is projected at Rs.67.97 per quintal.

33. Several state governments have provided estimates of cost of production and these were examined in detail and compared with the corresponding projections by the Commission based on the CS data for the ensuing season 2008-09. The cost estimates provided by the state of Haryana for 2005-06 is very close to the CS estimate. But, the estimate provided by Andhra Pradesh for the same year is higher than the corresponding CS estimate due to relatively higher level of paid out cost, Punjab has projected the cost of production at Rs. 148.52 per quintal and when it is adjusted for transportation charges, management and risk charges etc, it comes to Rs. 109.6 per quintal as per usual methodology adopted by the CACP. It is worth mentioning that the furnished cost of production of Rs. 109.60 per quintal for Punjab is much higher than the projected cost, owing to the higher rental charges considered by the state.

34. While fixing the SMP, the Commission considers not only costs of production, but also the cost of transportation, demand – supply situation of both sugarcane and sugar, trends in market prices of sugar in domestic as well as in international markets, including the price realized from sale of sugar. After examining the transportation charges for sugarcane by various modes of transportation, received from the states, the all India average transportation cost works out to Rs.13.36 per quintal. Considering marginal increase in the input prices during the past one year, there may be a justification for some increase in the SMP of sugarcane for 2008-09 season. But in view of the prolonged depression in the prices of sugar in both domestic and international markets, excessive supply of sugar vis-à-vis demand in the country and the deteriorating health not only of sugar industry, but also of sugarcane economy, there is no case for any increase in the SMP of sugarcane for 2008-09 season. In fact, based on the prevailing price realised from sale of sugar, there would be a justification for some reduction in the SMP from its present level, which may not however, be appropriate in view of the marginal increase in input prices as well as poor economic condition of farmers, as reported by the National Commission on Farmers and a number of other studies. On balance, therefore, it would be justified to fix SMP of sugarcane for 2008-09 at the previous year's level.

35. Thus, keeping in view all the relevant factors and the long run interest of both sugar industry and sugarcane growers, the Commission recommends that *the*

Statutory Minimum Price (SMP) of sugarcane payable by sugar factories for 2008-09 sugar season be fixed at Rs.81.18 per quintal for a basic recovery rate of 9 percent subject to a premium of Rupee 0.90 for every 0.1 percentage point increase in the recovery above that level. At the All-India average recovery rate of 10.22 per cent achieved in 2005-06 season, the SMP recommended comes to Rs.92.00 per quintal.

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August 13, 2007