

## **COMMISSION FOR AGRICULTURAL COSTS AND PRICES**

### **Report on Price Policy for Sugarcane**

#### **for the 2009-10 Sugar Season**

In this report, the Commission for Agricultural Costs and Prices presents its views on the price policy for sugarcane for 2009-10 sugar season. The Commission recommends that:

**(i) *the Statutory Minimum Price of sugarcane for 2009-10 sugar season be fixed at Rs. 125/-per quintal for a basic recovery rate of 9 per cent subject to a premium of rupee 1.39 for every 0.1 percentage point increase in the recovery above 9 per cent. At the All-India average recovery rate of 10.16 per cent achieved in 2006-07 season, the SMP recommended comes to Rs. 141.12 per quintal.*** (Para 32)

**(ii) Central Government should persuade the State Governments not to fix State Advised Prices (SAP), as it results in market distortions. If the State Governments, in order to benefit the cane growers, feel it necessary to fix SAP, then they need to amend their State Laws concerning purchase and control of sugarcane, by providing laid down economic criteria for fixation of SAP and the states concerned should be liable to pay the difference between the SMP and SAP so fixed by the state.** (Para 10)

**(iii) the Central Government should review the position on a regular basis and advise the state governments to make necessary arrangements for ensuring timely payment of cane price to farmers by the sugar mills.** (Para 11)

(iv) the production of India's sugar units should be made more cost-effective through modernization and upgradation in order to improve viability and export prospects in the overseas markets. Simultaneously, there should be adequate efforts for enhancement of sugar quality in keeping with the international quality norms of importing countries.

(Para 14)

(v) the Government should incentivise sugar mills to produce ethanol, alcohol, co-generation of power, etc. alongwith sugar.

(Para 15)

(vi) The issues related to minimum remunerative floor price for the procurement of ethanol and minimum guaranteed offtake of ethanol need to be sorted out by the Government without delay, so that the sugar mills would be inclined to make the requisite investment in setting up distilleries and ethanol plants. Also, there is a need for long term policy on assured procurement of ethanol at reasonable prices coupled with restrictions on the power of States to impose taxes arbitrarily on ethanol trading.

(Para 16)

(vii) Ministry of Power and Ministry of New and Renewable Energy may review their policies/programmes, and arrive at remedial measures to eliminate the impediments and accelerate the whole process through a sustainable long term policy on optimum co-generation of power, so that the full potential for co-generation could be realized.

(Para 17)

(viii) Government should constitute a Committee to examine the issue of quality of data, functioning of implementing agencies, etc., under the Comprehensive Scheme for the survey of cost of cultivation of principal crops in India.

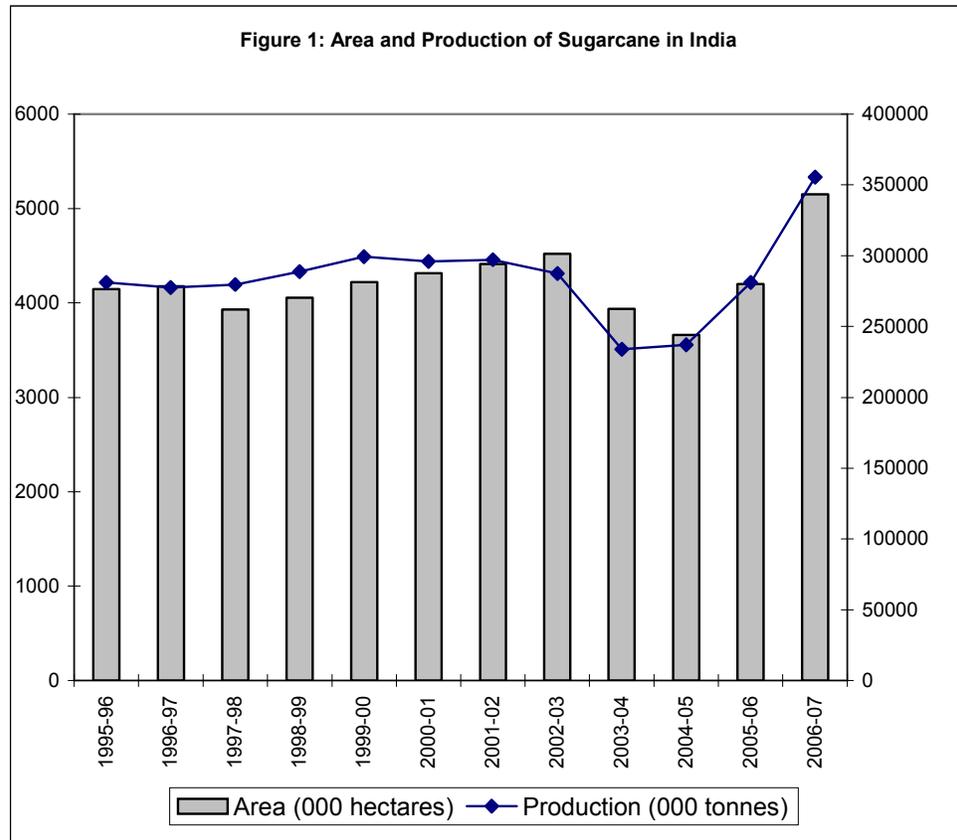
(Para 20)

**(ix) Instead of bonus, the Commission recommends a price stabilization fund similar to the one recommended by the National Commission on Farmers for the agricultural sector. (Para 31)**

2. The Commission submitted its report on price policy for sugarcane for 2008-09 sugar season on 13<sup>th</sup> August, 2007, 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 Re. 0.90 for every 0.1 percentage point increase in the recovery above that level. The decision on the SMP for 2008-09 season was announced by the Government on 20<sup>th</sup> March, 2008. *It is reiterated that the Government should avoid such delays and announce the SMP before the start of the sowing season. Otherwise, the very purpose of giving the right price signal to the sugarcane growers regarding the cultivation of sugarcane and related area allocation, gets defeated.* The Commission also submitted supplementary report on price policy for sugarcane for 2008-09 sugar season on 27<sup>th</sup> March, 2008 recommending that the SMP of sugarcane be fixed at Rs.125/- per quintal to be paid by the sugar mills and Rs. 30/- to be paid by the Government as bonus. This was followed by an additional report recommending that if the sugar mills are not in a position to pay Rs. 125/- per quintal, the break-up of payment of SMP may be modified as Rs. 100/- by the sugar mills and Rs. 55/- as bonus by the Government. It seems no decision on the supplementary reports has been taken by the Government so far.

3. The sugarcane sector has been featured by wide fluctuations in area under cultivation as well as production. This could be mainly attributed to the variation in price, payment of cane price by sugar mills, weather factors as well as market fundamentals pertaining to other competing crops. During the decade 1997-98 to 2006-07, the area under sugarcane was on the increase from 3.93 million hectares in 1997-98 to 4.22 million hectares in 1999-2000 and reached 4.52 million hectares in 2002-03. But thereafter there was a steep decline, and the area coverage became 3.94 million hectares in 2003-

04 and further declined to 3.66 million hectares in 2004-05 which remains as the trough year for area coverage. In the next year (2005-06), the area under the crop looked up to 4.20 million hectares and registered the record level of 5.15 million hectares in the year 2006-07. Similar fluctuations have been observed in respect of sugarcane production, but because of the undue fluctuations in yield, the increases in production were not commensurate with the increase in area under the crop. From 279.54 million tonnes in 1997-98, the production went up to 299.32 million tonnes in 1999-2000 which remained as the peak in production for several years. The subsequent year (2000-01) marked a decline in production to 295.96 million tonnes followed by a marginal recovery in 2001-02 to 297.21 million tonnes. Thereafter, there was a considerable decline and sugarcane production reached the rock bottom of 233.86 million tonnes in 2003-04. The year 2004-05 registered a recovery and the subsequent two years, 2005-06 and 2006-07, have delivered substantial enhancements in production at 281.17 and 355.52 million tonnes respectively. The production in the year 2006-07 remains as a record in production, as in the case of area coverage. However, as per the Fourth Advance Estimates released by the Directorate of Economics & Statistics, Ministry of Agriculture, dated 9<sup>th</sup> July, 2008, the production is anticipated to decline to 340.56 million tonnes. Alongwith this, there have been reports of area decline under sugarcane cultivation from several places. As per the available data, till 2006-07, the state of Uttar Pradesh continues to be on top both for area coverage and production, followed by Maharashtra and Tamil Nadu. Figure – 1 shows the changes in area and production of sugarcane in the country from 1995-96 to 2006-07.



4. The yield profile of sugarcane cultivation in India is also characterised by considerable fluctuations. From 711.34 quintals per hectare in 1997-98, the yield level marginally increased to 712.03 qtl/ha. in 1998-99, but thereafter it has been a tale of decline till 2003-04 and came down to 593.86 qtl/ha. in 2003-04, the lowest level registered during this period of analysis. In the years 2002-03 and 2003-04, the drop in productivity has been sharp. The period since 2004-05 exhibited signs of recovery, and became 690.22 qtl/ha. in the year 2006-07. Still, the peak of 712.03 recorded during the year 1998-99 remains to be surpassed or even equalled. In the years 2000-01 to 2002-03, the production levels could not move in tandem with the progress in area increases, because of the considerable drops in yield levels. As against area and production, for yield levels, the state of Tamil Nadu is on top, followed by Karnataka and Andhra Pradesh, during the year 2006-07. On the whole, it may be observed that the movements in sugarcane production are more governed by the drifts in area coverage than yield levels.

5. Corresponding to the fluctuations in area, production and yield of sugarcane, the production of sugar has also exhibited wide fluctuations. From 128.44 lakh tonnes in 1997-98, the production of sugar registered increases and became 185.10 lakh tonnes in 2000-01, marginally declined in 2001-02 to 184.98 lakh tonnes and in the next year remarkably increased to 201.32 lakh tonnes. However, thereafter there was drastic decline and sugar production reached 136.60 lakh tonnes in 2004-05. This gave way to substantial recovery and reached the record production of 281.99 lakh tonnes in 2006-07. However, the production is estimated to decline to 265.62 lakh tonnes in 2007-08. For the sugar season 2008-09, it is too early to make any precise estimate of sugarcane and sugar production. But as per estimates by the Indian Sugar Mills Association (ISMA), the production of sugar may further decline to 220 lakh tonnes, due to the anticipated reduction in the area under sugarcane. Assuming that there would be no imports of sugar and with the carry-over stock estimated at 112 lakh tonnes taking into account the latest sugar export figures for 2007-08, the total availability of sugar would be around 332 lakh tonnes. The consumption of sugar in 2008-09 is expected to be 225 lakh tonnes and export of 10 lakh tonnes. Thus, the estimated closing stock of sugar by the end of sugar season 2008-09 is likely to be around 97 lakh tonnes, which may be sufficient to meet 4-5 months requirement of the next sugar season, 2009-10. In view of this, the sugar season 2008-09 would experience reasonably good supply situation mainly because of the carry-over stock of 112 lakh tonnes. However, the anticipated low production of sugar due to expected low availability of sugarcane during 2008-09, may exert upward pressure on sugar prices. This should reverse the scenario of declining price trends which prevailed in 2006-07 and 2007-08, as evident from the latest price trends. It may be added that as against a mixed trend of price behaviour of sugar spot prices on NCDEX witnessed during the first six months of 2008, since 1<sup>st</sup> July, 2008 (till 5<sup>th</sup> August, 2008), the spot prices of sugar have shown increasing trend, i.e., from Rs.1429.60/qtl. on 1<sup>st</sup> July, 2008 to Rs.1834.65/qtl on 5<sup>th</sup> August, 2008, an increase of about 28 percent.

Moreover, futures contracts made in NCDEX for the months of September to December, 2008 are showing continuously increasing trend, Rs.1823/qtl. to Rs.1916/qtl., an increase of 8.4 percent from August, 2008 price of Rs.1768/qtl.

The balance sheet of sugar for the past five years is presented below:

**Table 1 : Balance sheet of sugar** (In lakh tonnes )

S. No	Particulars	2003-04 Sugar Year (Oct-Sept)	2004-05 Sugar Year	2005-06 Sugar Year	2006-07 Sugar Year (P)	2007-08 Sugar Year (E)	2008-09# Sugar Year (E)
1	<b>Carry over stocks</b>	116.16	85.00*	40.00*	44.00*	110.00*	112.00
2	<b>Production of sugar</b>	139.58	130.00	189.59	282.00	267.00	220.00
3	<b>Import of sugar</b>	5.53	20.74	3.62	0.01	-	-
4	<b>Total Availability (1 + 2+3)</b>	261.27	235.74	233.21	326.01	377.00	332.00
5	<b>Internal Consumption</b>	175.00	171.44	183.21	190.00	210.00	225.00
6	<b>Exports</b>	2.94	0.98	13.68	19.70\$	55.00\$	10.00
7	<b>Closing stocks at the end of season</b>	83.33	63.32	36.32	116.25	112.00	97.00

P: Provisional E: Estimated.

\* : Based on the closing stocks vetted by the Central Excise Authorities

\$ : As per figures provided by M/o Commerce.

# : Estimated by ISMA (except carry over stock)

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

6. According to FAO's Food Outlook June, 2008, the global sugar production for 2007-08 was estimated at 168.0 million tonnes, 1.9 million tonnes (1.1 percent) more than the production of 2006-07. The sugar output in developing countries for 2007-08 is estimated to grow by 2.1 percent to reach 127.5 million tonnes as compared to 9.1 percent increase in 2006-07. On the other hand, output of developed countries is forecast to decline by 1.8 percent at 40.4 million tonnes as against the 6.3 percent decline in the previous year. The estimated production in Asia would be 65.8 million tonnes for 2007-08, marginally lower than the production in 2006-07. The FAO estimates of world sugar consumption in 2007-08 is 158.2 million tonnes (raw value), 4.2 million tonnes more than in 2006-07, registering an increase of 2.7 percent. Similarly,

the growth in sugar consumption in respect of the developing countries is estimated to be 3.5 percent to 109.4 million tonnes from the previous year's estimate of 105.6 million tonnes. Nevertheless, as per the estimates, the current global sugar supply would be in excess of consumption by 9.8 million tonnes that would raise the stocks-to-use ratio to 48.3 percent, up from 46.2 percent in 2006/07.

7. Since the production level remained higher than the consumption level, world raw sugar prices exhibited a southward movement from mid-2006. The International Sugar Agreement (ISA) daily price for raw sugar averaged US 9.29 cents per pound in June, 2007, which was the lowest level and 52 percent less than the 25 year high reached in early 2006. The prices recovered at US 10.17 cents in July, 2007 and reached US 13.86 cents in March, 2008 and declined to US 13.20 cents per pound in April, 2008 but was 29 percent higher than the corresponding month of 2007. A few significant factors that played up the recovery in prices include high energy prices, weakness of US Dollar, anticipated drop in production of sugar in India and Brazil and the potential influence of investment funds on the sugar futures market.

8. On the domestic front, the yearly average of wholesale prices of sugar (M-30) in different up markets in the country indicate that average wholesale price of sugar per quintal that was quoted between Rs.1954 (Amritsar) to Rs.2076 (Delhi) in 2005-06 decreased up to Rs.1611 (Muzzafarnagar) to Rs.1791 (Patna) in 2006-07, further dipped to Rs.1622 (Delhi) to Rs.1546 (Kanpur) in October 2007 - June 2008. The trend of WPI of sugar has been different from that of several other commodities. It declined gradually from 141.2 in 1999-2000 to 119.0 in 2002-03. This was followed by a sharp increase to 135.2 in 2003-04. This uptrend in sugar prices continued in 2004-05 and 2005-06 and reached 169.3 in 2005-06. During 2006-07, the WPI declined to 150.4, a decline of 11.2 percent from the previous year. The sugar prices continued its decreasing trend till end of December, 2007 (except September

and October, 2007), by 6.5 percent in 2007-08. WPI of sugar declined about 18 percent from May, 2006 to December, 2007. From January, 2008 onwards it showed an increasing trend and stood at 149.6 in April from 140.6 in December, 2007. However, there were marginal declines during the months of May and June, 2008, and the WPI averaged at 144.9 during 2007-08, a decrease of 3.6 percent from 2006-07. The Working Group for revision of Wholesale Price Index Numbers (Base: 1993-94=100) has submitted the Technical Report on the subject to the Government. The said Working Group has decided to shift the base for WPI to 2004-05. As per the tentative weighting diagram drawn for the new Series of WPI (Base: 2004-05), the proposed weight for Sugar, Khandsari and Gur category has been reduced to 2.02534 from 3.92876 for 1993-94 base period. If finally approved, this will have significant lower impact on overall inflationary levels. (Table 6).

9. In order to ensure that falling prices of sugar does not lead to a situation of mounting sugarcane payment arrears, the Central Government during the previous year had created a total buffer stock of 50 lakh tonnes of sugar for the period upto 31.07.2008; the buffer subsidy and additional credit offered in this regard were to be exclusively used for the payment of cane price arrears. Government provided 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 and also allowed sugar exports under Open General Licence (OGL) without any ceiling.

10. 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), generally higher than the SMP. However, sugar

mills especially in years of low sugar prices in the markets, fail to pay state advised prices and as a result, the arrears in this regard get accumulated. Accordingly, the Commission reiterates that the ***Central Government should persuade the State Governments not to fix State Advised Prices (SAP), as it results in market distortions.*** If the State Governments, in order to benefit the cane growers, feel it necessary to fix SAP, then they need to amend their State Laws concerning purchase and control of sugarcane, by providing laid down economic criteria for fixation of SAP and the states concerned should be liable to pay the difference between the SMP and SAP so fixed by the state.

11. 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. Still, the problem of cane price arrears persists and acquires greater dimensions during years of higher sugar production. Despite these, the cane price arrears have been increased from 10.7 percent in 2006-07 to 30.9 percent in 2007-08. The Commission recommends that **the Central Government should review the position on a regular basis and advise the state governments to make necessary arrangements for ensuring timely payment of cane price to farmers by the sugar mills.** (Table 3)

12. Futures trading in sugar had been permitted under Section 15 of the Forward Contracts (Regulation) Act, 1952 since 14<sup>th</sup> May, 2001 as a conditionality to decontrol of sugar. Futures trading commenced for the first time on 6<sup>th</sup> February, 2003 at the National Commodity Exchange, Ahmedabad. Presently, sugar is mainly traded on the platform of NCDEX, which accounted for 96.3 percent of the total volume of futures trading during 2005-06, 90 percent during 2006-07 and 93.4 percent during the current financial year 2007-08, and the rest in MCX, Mumbai. It needs to be

appreciated that 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. It could open up a fair and neutral method of price discovery so that the stakeholders could arrive at their production decisions, perceiving the price signal.

13. The excess of production over consumption requirements in the country during the years 1998-99 to 2002-03, prompted the Government to push up export of sugar through various WTO compatible incentives. As a result, export of sugar increased from 13 thousand tonnes in 1999-2000 to 16.62 lakh tonnes in 2002-03, but declined to 12 lakh tonnes in the next year. The Government decided to withdraw the incentives in June, 2004 when the sugar stocks registered drastic declines because of the fall in sugar production in 2003-04. The exports took a beating in 2004-05 to 1.09 lakh tonnes. There was only a marginal improvement to 3.17 lakh tonnes in 2005-06, but the year 2006-07 recorded a sharp increase to 19.70 lakh tonnes. Owing to various export incentives provided by the Government and availability of surplus sugar, the exports reached 55.05 lakh tonnes in 2007-08. (Table 5)

14. In these times of increasing globalization, it is imperative that effective measures are brought immediately so that the Indian sugar industry could improve its cost efficiency to successfully sustain its presence in the international market. Attaining economies of scale by the industry should be of priority. Accordingly, the Commission reiterates that **the production of India's sugar units should be made more cost-effective through modernization and upgradation in order to improve viability and export prospects in the overseas markets. Simultaneously, there should be adequate efforts for enhancement of sugar quality in keeping with the international quality norms of importing countries.**

15. Sugarcane is a multipurpose crop that enables its utilization, in addition to sugar, in the preparation of ethanol, alcohol, co-generation of power and organic manure. Hence, any excess production of cane beyond the requirement for sugar production could be diverted towards the production of ethanol by sugar mills. As the Commission has already stated, the sugar industry must look beyond sugar production for their effective survival and viability. Ensuring viability through uni-production of sugar by the mills should be taken as outdated. Therefore, the Commission reiterates its earlier recommendation that **the Government should incentivise sugar mills to produce ethanol, alcohol, co-generation of power, etc. alongwith sugar.**

16. The ethanol required for 10 percent blending with petrol could be made out of the existing available molasses and if required, it can be produced directly from sugarcane juice. There is greater need for the increased use of ethanol for blended petrol, keeping in view the country's high dependence on import of crude oil and the undue increase in its price which is not showing any sign of significant abatement in the near future. The experience of USA and Brazil in this regard should impart guidance for India. Vide decisions taken on 9<sup>th</sup> October, 2007, the Government had approved 5 percent blending of ethanol with petrol mandatory across the country, except in Jammu & Kashmir, North-Eastern states and Island Territories and to make 10 percent blending optional from October, 2007 and mandatory from October, 2008 and also a uniform purchase price of Rs.21.50 per litre ex-factory for supply of ethanol. The 5 percent blending made mandatory in October, 2007 is being implemented in most of the notified states except West Bengal, Orissa, Chattishgarh, Kerala and Tamil Nadu, even though the progress has been reportedly not to the desired extent. The programme of ethanol blended petrol (EBP) could not progress well also 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. Pricing of ethanol is another outstanding issue between the oil companies and the sugar industry.

The price of ethanol declared by the Government of India, @ Rs.21.50 per litre ex-factory has not been found remunerative in the view of sugar mills and discourages them from ethanol production. **The issues related to minimum remunerative floor price for the procurement of ethanol and minimum guaranteed offtake of ethanol need to be sorted out by the Government without delay, so that the sugar mills would be inclined to make the requisite investment in setting up distilleries and ethanol plants. Also, there is a need for long term policy on assured procurement of ethanol at reasonable prices coupled with restrictions on the power of States to impose taxes arbitrarily on ethanol trading.**

17. Sugarcane is taken as the most energy efficient crop in the context of co-generation of power. As per Government's announcement, 10 percent of energy plan is to be generated by renewable sources by the year 2012. As per estimates, sugar mills have the potential to produce about 5000 MW of electricity from bagasse through optimum co-generation. It is unfortunate that the total capacity installed (800 MW) / in the process of installing of co-generation facility for power (1512 MW) by sugar mills remains at about 2312 MW. In spite of the several incentives provided as well as the guidelines issued by the Central Government, the Industry has been lagging behind in achieving the potential for co-generation of power. Therefore, the Commission recommends that **Ministry of Power and Ministry of New and Renewable Energy may review their policies/programmes, and arrive at remedial measures to eliminate the impediments and accelerate the whole process through a sustainable long term policy on optimum co-generation of power, so that the full potential for co-generation could be realized.**

18. The Government has constituted a Group of Experts during August, 2007 which is presently under the chairmanship of Dr. Y.S.P Thorat, ex-Chairman, NABARD, to examine various options available for the growth and development of the sugar economy and to suggest a blueprint of action. The

terms of reference of the Group of Experts, inter alia, include looking into the present state of the sugar economy and perspective plans for strengthening it, measures for de-regulation, optimizing the use of bi-products of sugar industry, augmentation of crushing and refining capacities, and possibilities such as production of refined sugar/alcohol/ethanol directly from sugarcane juice. The Group would be submitting their report to the Government shortly. It is expected that their recommendations would have a proper coverage of the various aspects discussed above, and come out with short, medium and long-term perspective plans for facilitating the overall development of the sector.

19. The cost of production is among the important considerations in the determination of SMP of sugarcane. Cost on account of human labour constitutes the major portion of the total variable input cost of sugarcane. It varies between 60 and 70 percent of the total input cost in the majority of sugar growing states. The Commission submitted its report on price policy for sugarcane for 2008-09 sugar season on 13<sup>th</sup> August, 2007. It was further supplemented with a report on 27<sup>th</sup> March, 2008, followed by another report dated 31<sup>st</sup> March, 2008. Since no decision on the supplementary reports has been taken by the Government, the Commission has now undertaken the estimation of cost of production of sugarcane for the sugarcane season 2009-10, following the traditional methodology based on the fresh estimates of cost of cultivation/cost of production generated under the comprehensive scheme of Directorate of Economics and Statistics, Ministry of Agriculture, for the year 2006-07.

20. As in the past, the Commission had wide ranging discussions with the State Governments, Farmers' Associations, Agricultural Universities and other stakeholders on 5<sup>th</sup> and 6<sup>th</sup> August, 2008. During these discussions, the farmers' representatives conveyed their unhappiness with the cost of cultivation data used by the Commission for arriving at Statutory Minimum Prices for sugarcane. Apart from not taking into account facts such as

weather risk element, etc., they were very much concerned about the quality of data used. It was clarified to them that the cost data used by the Commission are collected and processed under a plan scheme, viz., Comprehensive Scheme for Studying the Cost of Cultivation of Principal Crops in India operated by the Ministry of Agriculture. The Commission only receives final state-wise consolidated data. The shortcomings by way of quality of data has already been brought to the notice of the Ministry. While issues on non-inclusion of factors such as weather risk element, transport cost, etc. can be explained in view of final decision yet to be taken based on technical committee recommendations, genuine concerns of farmers on quality of data which has a major bearing on overall cost of production and thereby on support prices, have to be seriously addressed. **Government should constitute a Committee to examine the issue of quality of data, functioning of implementing agencies, etc., under the Comprehensive Scheme for the survey of cost of cultivation of principal crops in India.**

21. According to the latest information available from the Labour Bureau, Shimla, the actual wage rates for agricultural labourers have recorded an increase in all the sugarcane growing states between March, 2007 and February, 2008. The order of increase in the wage rate is highest at 15.44 percent for Haryana followed by Karnataka (15.35 percent), Andhra Pradesh (12.32 percent), Tamil Nadu (11.82 percent), Uttar Pradesh (11.46 percent) and Maharashtra (4.34 percent). The price of High Speed Diesel (HSD), as measured by wholesale price index (WPI) has increased by about 13.79 percent in the period between July, 2007 and June, 2008. The WPI of one of the petro-based inputs, lubricants rose by 15.27 percent, with diesel oil (LDO) recording increase by 43.14 percent during the same period. The WPI of other inputs are reported to have increased by 6.74 percent for fertilizers, 5.88 percent for non-electrical machinery and electricity together for agricultural purposes. Similarly, the price of cattle feed in terms of WPI has shown considerable increase by 15.78 percent, fodder increasing

marginally by 3.71 percent. The WPI for tractor has increased by 2.17 percent, and pesticides marginally increased by 3.71 percent.

22. The Commission has received the cost of cultivation/cost of production data for sugarcane from the Directorate of Economics and Statistics, Ministry of Agriculture, for the period 2006-07 in respect of the major sugarcane growing states of Andhra Pradesh, Haryana, Karnataka, Maharashtra, Tamil Nadu, Uttar Pradesh and Uttarakhand. The comparative analysis of actual cost data for sugarcane for the two years of 2005-06 and 2006-07 reveals that the paid-out cost including family labour (A2+FL) per hectare has recorded an increase in all the states excepting Maharashtra and Uttar Pradesh where it has declined by (-)15.33 percent and (-)0.51 percent respectively. The paid-out cost including family labour per quintal has recorded a decline in the states of Andhra Pradesh (-)9.11 percent, Maharashtra (-)19.21 percent, and Uttar Pradesh (-)0.40 percent. The increase in the A2+FL cost per quintal is observed in Haryana by 3.39 percent, and Tamil Nadu by 2.13 percent. It is remarkable to point out that Uttarakhand has witnessed an increase of 38.13 percent in A2+FL cost together with fall in yield rate by (-)5.99 percent. This decline in yield rate has contributed considerably to increase in both A2+FL cost and C2 cost for Uttarakhand. The yield rate is maximum at 22.16 quintal per hectare for Andhra Pradesh and this has resulted in decline in C2 cost of production by (-) 7.67 percent. Uttar Pradesh has registered marginal decrease in yield of (-) 0.33 percent. The state of Haryana has witnessed increase in yield by 11.25 percent and at the same time its A2+FL cost and C2 cost have also recorded increase by 3.39 percent and 2.09 percent respectively. Similar is the case for Tamil Nadu where the increase in yield of 5.63 percent is not accompanied by decrease in cost of production; the cost of production on A2+FL basis has recorded increase by 2.13 percent and on C2 basis by 1.19 percent.

23. In order to arrive at the likely cost of production of sugarcane in different sugarcane growing states for the ensuing season 2009-10, the Commission has as usual adopted the base level cost data generated under comprehensive scheme (CS) for the latest 3 years ending 2006-07. The per hectare variable input costs are projected using the methodology of projecting input prices for the ensuing season based on the current series of data on wage rates, fertilizer prices, seed prices, irrigation charges, etc. The trends of possible movement of input prices being crucial to estimating cost of production per quintal for the year 2009-10, the Commission as far as possible takes account of the updated data on prices of different inputs, wage rates etc. and computes for each state and crop weighted composite input price index, weights being the share of each input in the total operational cost net of interest. The weighted composite input price index estimated for the year 2009-10 provides on an average a clue to how much input price in general is expected to go up for the year under consideration compared to each of the latest 3 years' actual input prices. The all India paid-out cost including family labour (A2+FI) per quintal and overall (C2) cost per quintal are arrived at by taking weighted average of respective state specific estimated costs, weights being shares of production of each state in absolute quantity in total production. On the basis of trends observed in the state specific input price indices, it is evident that composite variable input cost index during the period 2006-07 to 2009-10 is estimated to increase by about 12.2 percent for Uttarakhand, 10.9 percent for Uttar Pradesh, 9.2 percent for Tamil Nadu, 11.9 percent for Maharashtra, 17.1 percent for Karnataka, 8.6 percent for Haryana, and 18.7 percent for Andhra Pradesh.

24. The C2 cost of production of sugarcane in respect of various states for the year 2009-10 is projected to an average of Rs.103.50 per quintal for Andhra Pradesh, Rs.90.45 per quintal for Haryana, Rs.73.57 per quintal for Karnataka, Rs.92.28 per quintal for Maharashtra, Rs.87.68 per quintal for Tamil Nadu, Rs.73.53 per quintal for Uttar Pradesh and Rs.64.56 per quintal for Uttarakhand. The weighted average cost at all India level works out to

Rs.81.15 per quintal. This all India estimated figure of Rs.81.15 per quintal is unadjusted, in the sense that this cost has been arrived at without making allowance for state-specific recovery rates. When adjusted for basic recovery rate of 9 percent, and using state specific average recovery rates for the triennium ending 2006-07, the C2 cost of production for 2009-10 works out to Rs.91.95 per quintal for Andhra Pradesh, Rs.82.31 per quintal for Haryana, Rs.62.82 per quintal for Karnataka, Rs.72.34 per quintal for Maharashtra, Rs.83.95 per quintal for Tamil Nadu, Rs.69.01 per quintal for Uttar Pradesh and Rs.60.97 per quintal for Uttarakhand. The adjusted weighted average C2 cost of production is projected at Rs.72.91 per quintal.

25. Several State Governments have furnished estimates of cost of production for the year 2006-07 and 2007-08 and these were examined and compared with the corresponding cost estimates for the year 2006-07 made available to the Commission from the Directorate of Economics and Statistics. The cost of production per quintal for Haryana is reported higher in the state reply than that in CS estimates for the year 2006-07. This is mainly due to state reply of Haryana showing the yield rate of 600 quintals per hectare as against 645 quintals per hectare given in the CS estimates. The state of Andhra Pradesh holds the similar picture of its cost of production being higher than given in the CS estimates for the year 2006-07. This mainly arises from the fact that the state reply of Andhra Pradesh reports lower yield rate of 800 quintals per hectare compared to 839.85 quintals per hectare given in the CS estimates. In regard to Tamil Nadu, the cost of production in the CS estimates is higher than that given in the state reply. Similarly, for Maharashtra, the CS estimate of cost of production is Rs.80.15 per quintal for the year 2006-07 which is higher than Rs.68.61 per quintal in the state reply. The projected C2 cost for Maharashtra for the year 2009-10 is put at Rs.100 per quintal as against Rs.70.34 per quintal projected based on CS data. This is due to the fact that projection for Maharashtra in the state reply takes account of profit margins and marketing charges that are not accounted for by the projections of the Commission.

26. In arriving at SMP, the Commission considers not only cost of production but also several other factors including the cost of transportation, demand-supply situation of both sugarcane and sugar, market price trends of sugar in domestic as well as international markets including price realized from the sale of sugar. The transportation charges for sugarcane by various modes of transportation, received from the states show that the all India average cost at present does not exceed the level of Rs.13.36 per quintal considered for the sugar season 2008-09. Therefore, the Commission considers it appropriate to maintain the existing level of transportation cost at Rs.13.36 per quintal. If we add the transportation cost to the adjusted weighted average C2 cost of production, the total cost of production for the sugar season 2009-10 comes to Rs.86.27 per quintal.

27. Cost of production is generally considered as the most important factor in the determination of SMP for sugar. In relation to cost of production, the Commission recommended SMP of Rs.81.18 per quintal for a basic recovery rate of 9 percent for the sugar season 2008-09. As mentioned earlier, the Commission also submitted a supplementary note and additional note on SMP for sugar season 2008-09. No decision has been taken on the recommendations made by the Commission on these two notes. *However, the Commission feels that there is a need for substantial hike in SMP over cost of production for the sugar season 2009-10 as compared to the SMP of Rs.81.18 fixed by the Government for 2008-09 because of changes in agricultural and sugar economy in the last one year.*

28. The most important change is that there has been a substantial rise in the minimum support prices of kharif and rabi crops particularly wheat and paddy which has tilted the inter-crop price parity against sugarcane crop. The ratio of net return from paddy and wheat to that of sugarcane increased significantly due to substantial hike in the MSPs of paddy and wheat and no increase in the SMP of sugarcane. As a result of this tilt towards paddy and

wheat, the area under sugar cane already declined significantly. The Commission has also got feedback from the farmers and mills that the area under sugarcane is getting reduced in favour of other crops. It may be noted that area and production of sugarcane could decline drastically, unless the relative profitability of sugarcane crop is restored vis-à-vis paddy and wheat and other substitute crops. The Commission also received cost of production data for sugarcane from farmers associations. It ranges from Rs.150 to Rs.200 per quintal at 9 percent recovery.

29. The sugar production may decline in the 2008-09 season due to expected decline in the area under sugarcane. Although the estimated closing stocks indicate comfortable situation for the season 2008-09, the anticipated low production of sugar due to expected low availability of sugarcane would put substantial upward pressure on sugar prices. Already market prices of sugar have increased recently. The rise in sugar prices would reverse the scenario of declining price trends which prevailed in 2006-07 and 2007-08. This would help the sugar industry to pay higher sugar cane prices for the farmers. The international sugar prices are also higher compared to those of last year. The international price of raw sugar was 20 per cent higher in April 2008 than the corresponding month in 2007. The NCDEX sugar spot prices also increased from Rs.1429.60/qtl. on 1<sup>st</sup> July, 2008 to Rs.1834.65/qtl. on 5<sup>th</sup> August, 2008. The futures contracts made in NCDEX also show high price of Rs.1916/qtl. for December, 2008.

30. In the case of competing crops like paddy and wheat, the Commission has been fixing MSPs based on cost production with some margins. There was, however, deviation last year in the case of wheat and paddy because of greater weightage being assigned to food security in view of high domestic and international prices. The MSPs announced by the Government for wheat was more than 60 percent and paddy was around 40 percent higher than their cost of production. *Hence, sugarcane SMP also needs substantial hike over the cost of production plus transportation in view of the changed*

*scenario in the last one year. A reasonable upward revision in the SMP of sugarcane for 2009-10 would be necessary for protecting the interests of both farmers and the sugar industry. The rationale for this increase is due to greater weightage being given to demand-supply situation in terms of actual and potential decline in the area of sugar cane cultivation, inter-crop price parity and, relatively high market prices of sugar including futures market than the cost of production given by the Comprehensive Scheme.*

31. The supplementary note and additional note for the sugar season 2008-09 submitted by the Commission mentioned that bonus should be given in addition to SMP. The discussions with the Ministry of Food revealed that the Government would not entertain the concept of 'bonus' in the case of sugarcane. **Instead of bonus, the Commission recommends a price stabilization fund similar to the one recommended by the National Commission on Farmers for the agricultural sector.** The price stabilization fund for sugarcane can be used when there are fluctuations in the prices of sugar. When there is a shortage of sugar and sugarcane, more than SMP may have to be given to the farmers depending on the market situation. If the mills can not provide higher than SMP, Government can provide money from the price stabilization fund. Similarly, when there is a glut in sugarcane and sugar production, the industry may not be able to pay higher SMP. Again, the Government can provide money from the fund to bridge the gap between the price paid by the mills and SMP. In this way, farmers will not lose and get SMP even if there is a glut. It will not be a burden on mills also when there is over production and low sugar prices. Thus, price stabilization fund can be used in the time of shortage as well as over production to help the farmers. The message is that the Government should bear the burden beyond the bearable limits of sugar mills. The modalities for formulation of the price stabilization fund could be arrived at by the Government in consultation with the stakeholders.

32. Thus, considering all the relevant factors and the current status of sugarcane and sugar economy of the country, the Commission recommends that ***the Statutory Minimum Price of sugarcane for 2009-10 sugar season be fixed at Rs. 125/-per quintal for a basic recovery rate of 9 per cent subject to a premium of rupee 1.39 for every 0.1 percentage point increase in the recovery above 9 per cent. At the All-India average recovery rate of 10.16 per cent achieved in 2006-07 season, the SMP recommended comes to Rs. 141.12 per quintal. The Commission also recommends a price stabilization fund to take care of sugarcane farmers in situations of over production and shortages.***

-Sd-

(S. MAHENDRA DEV)

**CHAIRMAN**

-Sd-

(R. VISWANATHAN)

**MEMBER**

-Sd-

(V. M. JADHAV)

**MEMBER**

-Sd-

(K. G. RADHAKRISHNAN)

**MEMBER SECRETARY**

August 13, 2008