

COMMISSION FOR AGRICULTURAL COSTS AND PRICES
Report on Price Policy for Sugarcane for 2010-11 Sugar Season

In this report, the Commission for Agricultural Costs and Prices presents its views on the price policy for sugarcane for 2010-11 sugar season. The Commission recommends that:

- i) ***the statutory minimum price (SMP) of sugarcane for 2010-11 sugar season be fixed at Rs. 117/- per quintal for a basic recovery rate of 9.5 per cent subject to a premium of Rupees 1.23 for every 0.1 percentage point increase in the recovery above 9.5 per cent. At the all India average recovery rate of 10.30 per cent achieved in 2007-08 season, the SMP recommended comes to Rs. 126.84/- per quintal.***

(para 42)
- ii) **the Government should avoid delays and announce the SMP prior to the start of the sowing season.**

(para 2)
- iii) **all-out efforts are required from the Government and other concerned stakeholders to achieve substantial increase in the productivity of sugarcane to raise the level of production.**

(para 5)
- iv) **there is a need to give special thrust on increasing productivity in the States falling under the sub-tropical region.**

(para 6)
- v) **it is reiterated that the stipulated minimum distance between two sugar factories may be kept as 25kms.**

(para 16)
- vi) **the Central Government should persuade the State Governments not to fix State Advised Prices (SAP), as it leads to market distortions.**

(para 17)

vii) the Central Government should review the position on a regular basis and advise the State Governments to make such arrangements which would ensure timely payment of cane price to farmers by the sugar mills.

(para 18)

vii) Government should formulate a long term trade policy in order to enable the Indian sugar industry to be present in the export market on a sustainable basis and to become globally competitive.

(para 20)

ix) there is a need to promote R&D by State Agriculture Universities, Sugarcane Breeding Institute, and the sugar factories, in order to develop and promote varietal mixing of high yielding sucrose rich varieties of sugarcane suitable to different agro-climatic areas/regions.

(para 21)

x) there is a need for long term policy on assured availability and procurement of ethanol at the discovered prices through OMC tenders as well as rationalisation of different taxes/duties and other procedures followed by the States on ethanol trading.

(para 23)

xi) Government 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 of co-generation could be realized.

(para 24)

xii) credit and subsidy may be made available for increased farm mechanization, keeping in view the labour intensive nature of sugarcane cultivation and the emerging labour scarcity in the sector.

(para 28)

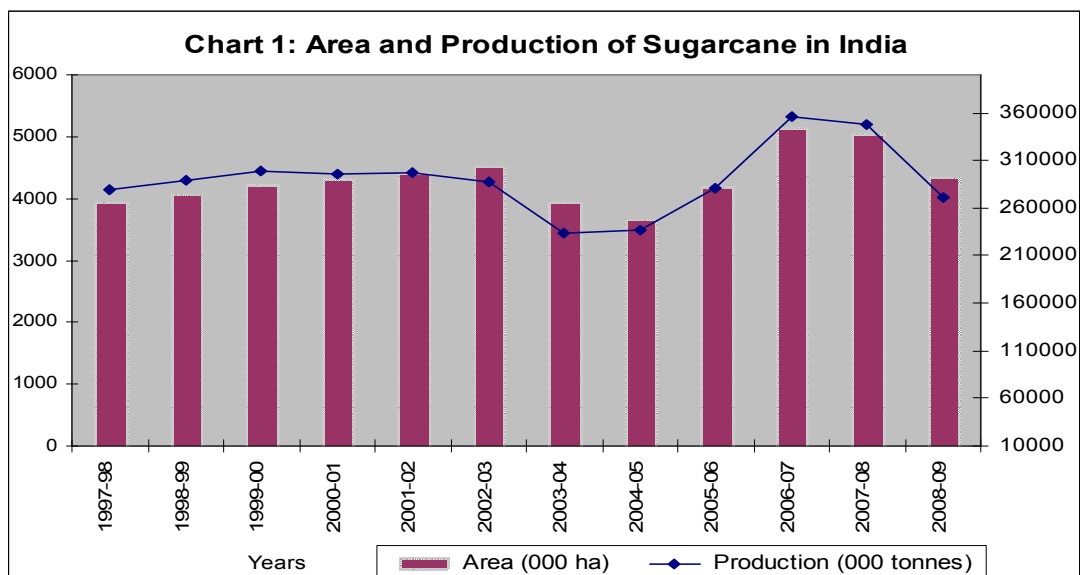
2. The Commission submitted its report on price policy for sugarcane for 2009-

10 sugar season on 14th August, 2008, recommending the Statutory Minimum Price (SMP) of Rs.125 per quintal linked to a basic recovery rate of 9 percent subject to a premium of Rs.1.39 for every 0.1 percentage point increase in the recovery above that level. The decision on the SMP for 2009-10 season was announced by the Government on 25th June, 2009 fixing it at Rs.107.76 per quintal linked to a basic recovery rate of 9.5 percent subject to a premium of Rs.1.13 for every 0.1 percentage point increase in the recovery above that level. Announcement of SMP before the commencement of crop season enables the farmers to be fully aware of the agricultural price policy and to take deliberate and informed decisions on whether to go in for a specified crop and about the level of investment for that purpose. An early announcement of SMP for 2009-10, whereby sugarcane price was increased by around 26 percent compared to the previous year, would probably have brought in more area under this crop. Therefore, the Commission reiterates that **the Government should avoid delays and announce the SMP prior to 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.

3. The area coverage in 2008-09 estimated at 4.34 million hectares as per the Second Advance Estimates of Directorate of Economics and Statistics (DES), Ministry of Agriculture, dated 12.02.2009, declined sharply by 14.2 percent from the previous year and down by 15.7 percent from the peak attained in 2006-07. The area under sugarcane cultivation as well as its production has registered wide fluctuations. The factors responsible for this could mainly be timing of declaration of SMP, payment position of cane price by the sugar mills, weather situations as well as market fundamentals relating to other competing crops. During the decade 1997-98 to 2007-08, the area under sugarcane has continuously increased from 3.93 million hectares in 1997-98 to 4.52 million hectares in 2002-03. Thereafter in 2003-04 the area has declined sharply to the earlier level of 1997-98, and further dipped to the lowest level of 3.66 million hectares in 2004-05, registering a drastic decrease of 19 percent. During 2005-06, the area under the crop rose to 4.20 million hectares, and reached the record level of 5.15 million hectares in the year 2006-07. It declined marginally in 2007-08 to 5.06 million hectares. But the area coverage in 2008-09, as estimated at 4.34 million hectares (Second Advance Estimates of DES), indicates a

sharp decline of 14.2 percent from the previous year. The average annual growth rate of area which was 2.64 percent during 1986-87 to 1996-97 suffered a major decline to 1.35 percent in the later period of 1996-97 to 2007-08.

4. As in the case of area coverage, the production of sugarcane during 2008-09 estimated at 271.25 million tonnes (Fourth Advance Estimates, DES, dated 21.07.2009) has shown a steep decline of 22 percent, related to the production level of 348.19 million tonnes registered during the previous year. During the period 1996-97 to 2007-08, the production which was at 279.54 million tonnes in 1997-98, increased to 299.32 million tonnes in 1999-2000 which remained as the peak for several years. After this, the production remained subdued at 295.96 and 297.21 million tonnes during 2000-01 and 2001-02, respectively. This was followed by dips in production and sugarcane production reached its lowest level of 233.86 million tonnes in 2003-04. During the subsequent years, the level of production began to look up, and attained 281.17 million tonnes in 2005-06. Similar to the record area coverage registered in 2006-07, the production also reached the record level of 355.52 million tonnes in that year. Subsequently in 2007-08, it marginally declined to 348.19 million tonnes. The average annual growth rate of production which was 3.99 percent during 1986-87 to 1996-97 greatly declined to 0.90 percent in the later period of 1996-97 to 2007-08. The trend in area and production of sugarcane in the country is shown in the Chart 1.

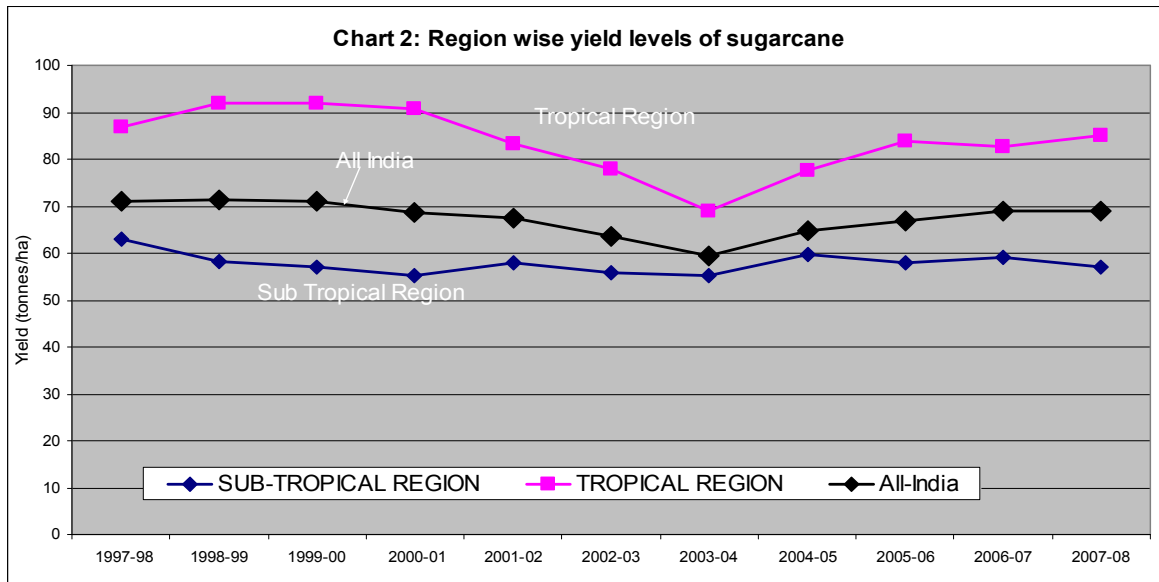


5. As regards the yield of sugarcane, it not only exhibited fluctuations similar to that of area and production, but also its growth rate has turned negative in the present decade ending 2007-08 from the positive growth rate in the earlier decade ending 1996-97. The yield level which was around 711 qtl/ha in 1997-98 and 1998-99, underwent continuous declines thereafter and hit the trough of 594 qtl/ha in 2003-04. During the next three years till 2006-07, there was recovery in the level of yield which improved to 690 qtl/ha, albeit lower than the attainment of 711 qtl/ha in 1998-99. However, in 2007-08, there was a slide in the yield to 688 qtl/ha, and further down to the estimated level of 625 qtl/ha in 2008-09. While the average annual growth rate in the yield of sugarcane which remained as 1.34 percent during the earlier period of 1986-87 to 1996-97, it turned negative at (-) 0.44 percent in the later period of 1996-97 to 2007-08. This is really a cause for concern. The analysis reveals that the production of sugarcane is primarily governed by the area coverage under the crop rather than its yield. Any increase in production would require more area under the sugarcane crop which does not seem to be feasible taking into consideration the required balancing in cropping pattern. Hence, there is an imperative need for enhancing the level of productivity in sugarcane cultivation. Accordingly, the Commission recommends that **all-out efforts are required from the Government and other concerned stakeholders to achieve substantial increase in the productivity of sugarcane to raise the level of production.**

6. There is wide variance among the States in respect of area, production and yield of sugarcane. As per the data available for 2007-08, Uttar Pradesh continues to be on top both for area coverage and production, contributing 43 percent and 35.8 percent of the total area and production, respectively. This is followed by Maharashtra (21.6 percent and 25.4 percent) and Tamil Nadu (7 percent and 11 percent). It is due to lower yield that Uttar Pradesh contributes less to production despite higher area coverage under the crop, while Tamil Nadu and Maharashtra are contributing more to production because of their better productivity. As against the all India average yield level (688 qtl/ha), Tamil Nadu ranks first (1075 qtl/ha), followed by Karnataka (858 qtl/ha), Andhra Pradesh (822qtl/ha) and Maharashtra (809qtl/ha). There is considerable difference between the yield levels of the tropical region and sub-tropical region. The yield level of tropical region (851qtl/ha) is higher by 49.3 percent from the yield level of sub-tropical region (570qtl/ha). Therefore, **there is a need to give**

special thrust on increasing productivity in the States falling under the sub-tropical region.

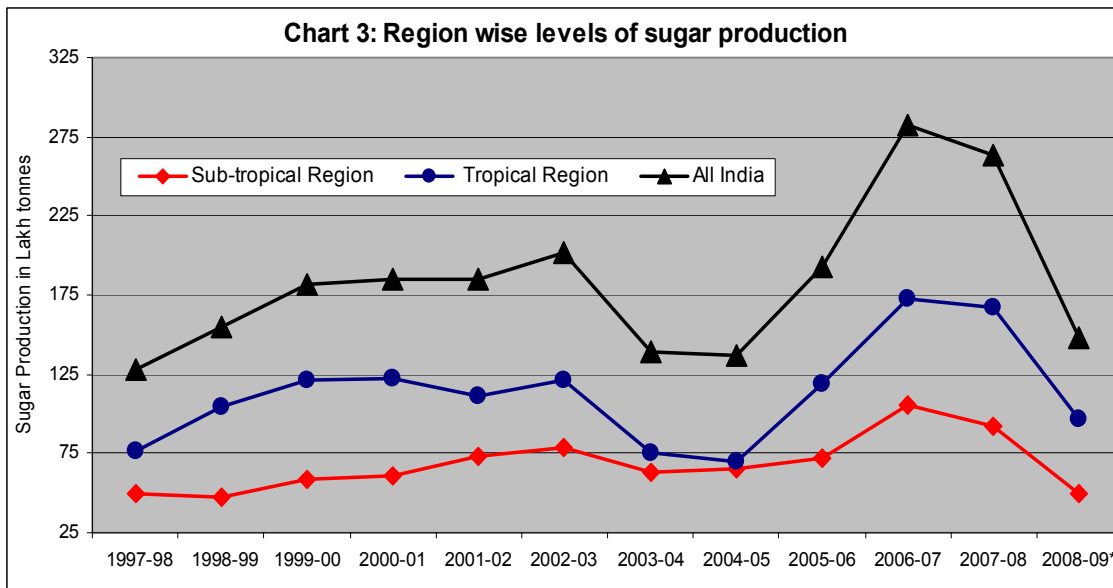
The trend in region-wise and all India yield levels of sugarcane in the country is shown in the Chart 2.



7. The production of sugar which is directly influenced by the fluctuations in production of sugarcane has also been featured by fluctuations. The production of sugar which was 128.44 lakh tonnes in 1997-98, increased to 185.10 lakh tonnes in 2000-01, declined marginally to 184.98 lakh tonnes in 2001-02 and in the next year increased significantly to 201.32 lakh tonnes. However, thereafter there was drastic decline and sugar production reached the lowest level of 136.60 lakh tonnes in 2004-05. Subsequently, sugar production registered a major recovery and achieved the record level of 281.99 lakh tonnes in 2006-07. Again, in 2007-08, the production underwent a decline to 262.98 lakh tonnes, i.e. by 6.74 percent. As estimated by the Directorate of Sugar, a steep decline has occurred in the year 2008-09 when the production level went down to 147.91 lakh tonnes, a reduction of more than 40 percent from that of the previous year. For the sugar season 2009-10, it is too early to make any precise estimate of sugarcane and sugar production, but taking into account the market fundamentals such as higher sugarcane prices and timely payment of cane prices by mills in 2008-09, the farmers may get encouraged to grow

more cane which could lead to higher production of sugarcane and sugar. The expectation is that the weak monsoon of the current season might not tell upon the cane production, as more than 90 percent of the crop is under irrigation.

8. The National Federation of Cooperative Sugar Factories has estimated sugar production as 200 lakh tonnes for 2009-10. Assuming that there would be negligible export, imports may increase to at least 35 lakh tonnes and with the carry-over stock estimated at about 40 lakh tonnes, the total availability of sugar would be around 275 lakh tonnes. The consumption of sugar in 2009-10 is expected at 235 lakh tonnes. Thus, the estimated closing stock of sugar by the end of sugar season 2009-10 is likely to be around 39 lakh tonnes, if import of 35 lakh tonnes materializes, which may be sufficient to meet two months requirement of the 2010-11 sugar season. In this perspective, it is expected that sugar season 2009-10 may experience better supply position in comparison to that of 2008-09. However, the anticipated low production of sugar due to low availability of sugarcane vis-à-vis its demand and the low level of opening stock during 2009-10 as well as the uprise in global sugar prices, may push up the domestic sugar prices. The trend in region-wise and all India production of sugar in the country is shown in the Chart-3.



9. The balance sheet of sugar for the past five years and projected for 2009-10 is given in the Table 1.

Table 1: Balance sheet of sugar (Sugar Year – Oct to Sep)
(In lakh tonnes)

Sl. No	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09 (P)	2009-10 (E)
1	Carry over stocks	85.00*	40.00*	44.00*	105.00*	105.00	40.00
2	Production of sugar	130.00	189.59	282.00	263.00	148.00	200.00
3	Import of sugar	20.74	3.62	-	-	20.00	35.00
4	Total Availability	235.74	233.21	326.00	368.00	273.00	275.00
5	Internal Consumption	171.44	183.21	199.00	215.00	225.00	235.00
6	Exports	0.98	13.68	17.00	48.00	1.00**	1.00
7	Closing stocks at the end of season	63.32	36.32	110.00	105.00	47.00	39.00

P : Provisional

E : Estimated by National Federation of Cooperative Sugar Factories

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

****:** Estimated for 2008-09 based on Exports in October-December 2008

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

10. FAO (Food Outlook, June, 2009) revised its earlier estimates of world sugar production for 2008-09, lowering it by 2.5 million tonnes at 158.5 million tonnes, 9 million tonnes (5.4 percent) less than the production of 2007-08. This was largely due to drastic decline of sugar production in India. The sugar production in Asia for 2008-09 indicates a substantial decline from 2007-08 owing to significant reduction in India and Pakistan by 45 percent and 23 percent respectively. Whereas, the production is expected to increase substantially in Brazil, Africa and Guatemala. FAO estimates of world sugar consumption in 2008-09 show an increase of 2.4 percent to 162.2 million tonnes, 3.8 million tonnes more than in 2007-08. But this increase is less when compared with the increase of 3.4 percent and 4.7 percent recorded in 2006-07 and 2007-08 respectively. The main reasons are, rising domestic prices of sugar and lower usage for industrial consumption because of economic slow-down. However, the

growth in sugar consumption in the developing countries is estimated to increase by 3.2 percent to 113.2 million tonnes. Shortages of sugar production in 2008-09, mainly in India, has given rise to a tighter supply position in the global market by about 4 million tonnes than the consumption demand. With the result, the stocks-to-use ratio would get reduced to 47 percent from 51.1 percent in 2007-08.

11. Since November, 2008, international sugar prices have shown steady upward trend from US 12.10 cents per pound to US 13.65 cents per pound in April, 2009 and reached a three year high of US 16.06 cents per pound in May, 2009, registering a significant increase of about 33 percent within a short span of about six months. The factors responsible for this substantial spurt in prices, inter alia, include steep fall in sugar production mainly in India and resultant erosion in the export availability internationally, and weakening of national currencies against US Dollar. However, the pace of increase in prices could have been faster if demand had not been curtailed due to world economic slow-down. Sugar prices may exhibit enhanced volatility, depending upon the extent of import of sugar by India from the world market to make up for deficit in its production. In recent times, the Brazilian sugarcane production is reportedly facing a setback due to excessive rains there, and the sugar prices have risen to a 28 year high at 19.30 cents per pound and are likely to rise further as indicated by the futures contracts for November, 2009.

12. Domestically, the sugar prices started picking up since January, 2008, The WPI of sugar which stood at 143.2 in January, 2008 reached 160.6 at the end of sugar season 2007-08 in September, 2008, an increase of 12.2 percent. This rise continued in 2008-09 and the WPI reached its highest level during the last ten years at 198.3 in June, 2009, an increase of 23.5 percent during the year. The price increase can be attributed to the steep fall in sugar production in 2008-09 which generated a huge demand-supply gap. The average wholesale prices of sugar (M-30) in different markets of the country indicate the extent of increase in prices. The wholesale price of sugar per quintal that was quoted between Rs.1450 (Kanpur) to Rs.1950 (Muzzafarnagar) in 2007-08, has increased up to Rs.1800 (Kanpur) to Rs.2800 (Amritsar) in 2008-09 up to June, 2009.

13. The trend of WPI of sugar has been different from that of several other commodities. Sugar price Index increased from 119.0 in 2002-03 to 135.2 in 2003-04 and this increase continued in the next two years and reached 169.3 in 2005-06, registering an average annual increase of 14 percent. In the subsequent two years, the prices of sugar declined by 11.2 percent and 1.8 percent in 2006-07 and 2007-08 respectively, due to excess supply over consumption demand. But this excess supply situation turned into short supply in 2008-09 sugar season, causing the sugar prices to increase by an average of 19.8 percent up to June, 2009 from the average level of the previous year. However, the increase in prices of gur and khandsari was higher (28.6 percent) than sugar, because of their localized demand and short availability of cane. Keeping in view the present sugar price scenario and rising trend noticed in global prices of sugar, it is expected that the upward pressure on sugar prices will continue in the near future. (Table 6)

14. On the other hand, as observed from the sugar prices witnessed on NCDEX during the 2008-09 season, futures prices were higher than the spot prices up to 9th April, 2009 and there was mixed trend thereafter. On 26th May, 2009, futures trading in sugar was suspended by the Government till 31st December, 2009. The spot prices of sugar on NCDEX which was Rs. 1410.20 per qtl on 31st May, 2008 increased to Rs.2300 per qtl as on 30th May, 2009, registering 63 percent increase in one year and further increased to Rs. 2553.35 per qtl as on 3rd August, 2009.

15. In respect of sugar, the Government has been taking measures whenever need arises for taking corrective steps. In the scenario of excess sugar production, declining sugar prices and mounting cane payment arrears in 2006-07 and also in 2007-08, the Central Government in 2006-07 had created a total buffer stock of 50 lakh tonnes of sugar; buffer subsidy and additional credit offered in this regard were to be exclusively utilized for the payment of cane price arrears and also provided export assistance for boosting exports and allowed sugar exports under Open General License (OGL) without any ceiling to incentivize export of sugar in 2007-08. In order to tackle the problem of shortage of sugar and its rising prices that were witnessed in 2008-09, the Government have taken several steps, viz., (i) import of raw sugar at zero duty by sugar mills under OGL and under Advance Authorization

Scheme (AAS) without levy obligation, (ii) import of white/refined sugar at zero duty by STC/MMTC/PEC and NAFED up to 10 lakh tonnes allowed under OGL without levy obligation and out of regulated release mechanism, which has been extended to private sector also recently, (iii) offloading the sugar from buffer stock and (iv) imposing stock and turnover limits on traders, etc. Such an adhoc policy approach and initiatives may not be in the interest of sustainable development of sugar industry as well as sugarcane growers. Therefore, the Commission is of the view that the Government should have a thorough review of the existing Act/control orders etc. pertaining to administering sugarcane and sugar economy and bring about the overall changes required, in order to come out with a comprehensive policy covering short, medium and long-term perspective plans for facilitating overall and sustainable development of the sector.

16. The radial distance between the two sugar factories is currently 15 kms. This was earlier 25 kms and was reduced to 15 kms since 1997. Thereafter, several new sugar factories have reportedly come up within the radius of 15 kms. This, in turn, is posing difficulties for the existing sugar mills with limited sugarcane availability. Instances are also reported of under-utilisation of capacity suffered by both existing and new units as well as sugarcane diversion from one zone to another. Sugar factories are of the view that this distance of 15 kms was envisaged at a time when the economic size of a sugar plant was considered to be 2500 tonnes of cane crushing per day (TCD). According to them, now the viable size of a sugar plant is reckoned at 5000 TCD or above, specially having regard to the need for development of associated by-product based industries such as cogeneration of power and production of ethanol. The growth prospects of the sugar units should in no way get hampered because of the lack of cane availability. It does not seem proper that with the increasing cane crushing capacity of sugar factories, the minimum distance between an existing factory and a new one has been reduced. Earlier, both the Mahajan Committee and the Tuteja Committee who looked into the matter had recommended a minimum distance norm of 25 kms. In the previous Reports also, the Commission had indicated that the minimum distance between two sugar factories may be kept as 25 kms. In view of the position stated above, **it is reiterated that the stipulated minimum distance between two sugar factories may be kept as 25kms.**

17. Even though the Government of India fixes the SMP of sugarcane for the country as a whole, it is working practically only in a few states, as several State Governments fix State Advised Prices (SAP) generally much higher than the SMP. This fixation of SAP is quite often devoid of the requisite economic analysis nor based on economic considerations. Sugar mills especially in years of low sugar prices in the markets, fail to pay SAP and as a result, the arrears in this regard get accumulated which discourage the farmers from cultivation of sugarcane. It has been repeatedly recommended by the Commission that the practice of announcing SAP by the State Governments needs to be discontinued. It is reiterated that **the Central Government should persuade the State Governments not to fix State Advised Prices (SAP), as it leads to market distortions.**

18. The Sugarcane (Control) Order, 1966 envisage payment of cane price within 14 days of the delivery of sugarcane to the factory and 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. In spite of these clear provisions, the problem of cane price arrears continues and aggravates during the periods of higher sugar production and low level of sugar prices. For instance, the cane price arrears have been 15.06 percent and 25.93 percent in 2006-07 and 2007-08 respectively, when there was huge production of sugar and the prices remained too low. In the current year when the sugar production was too low and prices were very high, the cane price arrears got reduced to 4 percent. Therefore, it is reiterated that **the Central Government should review the position on a regular basis and advise the State Governments to make such arrangements which would ensure timely payment of cane price to farmers by the sugar mills.**

(Table 3)

19. Futures trading in sugar had been permitted under Section 15 of the Forward Contracts (Regulation) Act, 1952 since 14th May, 2001 as a conditionality to decontrol of sugar. Sugar is mainly traded on the platform of NCDEX, which accounted for 90 percent of the total volume of futures trading during 2006-07, 93.4 percent during 2007-08 and 99.6 percent in the current financial year, and the rest in

MCX, Mumbai. Certain distinct advantages flow from the futures trading in 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. Moreover, there could be a fair and neutral method for price discovery. Accordingly, the stakeholders could arrive at their production decisions, in the light of the price signals that are received. However, the futures trading in sugar has been suspended till 31st December, 2009 by Forward Markets Commission on 26th May, 2009.

20. India attained its position as the second largest producer of sugar and as a regular exporter since 2005-06. However, India has lost its ground in 2008-09 and has again become a major importer of sugar. In the absence of a long term consistent policy on sugar economy including exports and imports, there had been chances of loosing every time either in the case of importing or in the case of exporting of sugar. Ad-hoc and need based arrangements have become the major characteristic of India's approach towards sugar export and import. The Government used to give export incentives to liquidate excess stocks of sugar and withdraw them when stocks position normalized. For sustained presence in the overseas markets, long-term relationships with the foreign buyers/sellers are required. In view of this, it is imperative that Government should avoid ad-hoc steps. A long term trade policy in sugar is the need of the hour so as to allow Indian sugar industry to compete in the world market. Therefore, the Commission recommends that **Government should formulate a long term trade policy in order to enable the Indian sugar industry to be present in the export market on a sustainable basis and to become globally competitive.**

21. The SMP of sugarcane is linked to the recovery rate of sugar. The sugarcane growers falling under the coverage of sugar factories with high recovery get higher SMP and vice versa. The recovery ratio is substantially influenced by the (i) high yielding varieties of sugarcane having more sucrose content; (ii) efficient arrangements to make available fresh cane for crushing through optimum mixing of early, mid and late varieties of sugarcane and harvesting of cane on maturity suitable for climatic conditions; and (iii) efficiency of the plant and machinery operating in the sugar factories. Thus in order to improve the recovery rate of sugar, there is an imperative need to promote high yielding varieties of sugarcane having more

sucrose content suitable to different agro- climatic zones, and sufficient availability of fresh cane to mills through proper varietal mixing of cane cultivation of early, mid and late varieties. Also, the sugar factories are to be enthused to improve the operational efficiency through modernization of plant and machinery and enhancement of installed capacity leading to economies of scale. Accordingly, the Commission recommends that **there is a need to promote R&D by State Agriculture Universities, Sugarcane Breeding Institute, and the sugar factories, in order to develop and promote varietal mixing of high yielding sucrose rich varieties of sugarcane suitable to different agro-climatic areas/regions.**

22. Sugarcane is essentially a multipurpose crop. It finds application not only in the production of sugar, but also in the production of khandsari, gur (jaggery), ethanol, alcohol, and organic manure as well as co-generation of power. Hence, the production of all these depends on the adequate availability of sugarcane. Any shortfall in the production of sugarcane such as experienced in 2008-09, would adversely affect the production of these co-products, mismatch their market fundamentals and disrupt the growth of these segments. Keeping in view the multifarious use/applications of sugarcane, efforts are warranted to maintain its production at an adequate level. At the same time, the sugar industry must visualize their prospects beyond the traditional production of sugar and effectively enter into production of ethanol, alcohol, cogeneration of power etc so as to ensure that their units are viable at all times. This would also enable them to discharge their payment obligations to farmers promptly.

23. The ethanol that could be produced from sugarcane molasses is an energy source. It is considered appropriate for blending with petrol as an alternative source of clean and renewable energy. There has to be enhanced use of ethanol for blended petrol, considering the country's continued high dependence on import of crude oil and the upswings in its price. Presently, the 5 percent Ethanol Blending Programme (EBP) with petrol which was made mandatory across the country from October, 2007, except in Jammu & Kashmir, North-Eastern states and Island Territories, is being implemented in 16 States and 3 UTs. Out of the assessed requirement of 180 crore litres of ethanol for three years, the Oil Marketing Companies (OMCs) have been able to contract 156.6 crore litres and procured 57.16 crore litres as on 31.07.2009. The

EBP releases have commenced in all the concerned states except in West Bengal, Orissa, Chattishgarh, Jharkhand, Kerala and Tamil Nadu where the programme suffered due to non-availability of ethanol vis-à-vis the requisite demand and problems like differential procedure on movement of ethanol and taxation policy which need to be resolved by the Ministry of Petroleum and Natural Gas. There is also reluctance on the part of OMCs to purchase ethanol at a pre determined price @ Rs.21.50 per litre since the purchase price is finalized through open tender system. Because of all these issues, the initiative of 5 percent EBP has not taken off. For the smooth implementation of 5 percent EBP and its later increase to 10 percent EBP (being studied in pilot project by IOC), it will have to be ensured that sufficient quantum of ethanol as per the requirement at all notified locations, is available. Therefore, the Commission recommends that **there is a need for long term policy on assured availability and procurement of ethanol at the discovered prices through OMC tenders as well as rationalisation of different taxes/duties and other procedures followed by the States on ethanol trading.**

24. 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 from renewable sources by the year 2012. There are estimates indicating that the existing sugar mills possess the potential for generating about 5000 MW of power from bagasse through optimum co-generation. As against this, up to 31st March, 2009, the total capacity installed by 109 co-generation projects was 1048.73 MW and 118 projects for 1591 MW capacity are in the process of installing co-generation facility of power. Still, the efforts and progress are short of the potential by about 1400 MW. This is despite several incentives in this regard provided by the Central Government. Also, co-generation is reportedly picking up in the private sugar mills but not so in cooperative/public sector mills, due to problems mainly institutional and financial resulting in non-availability of funds for investment in optimum co-generation. Therefore, the Commission reiterates its earlier recommendation that **Government 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 of co-generation could be realized.**

25. It is understood that the Group of Experts constituted by the Government under the chairmanship of Dr. Y.S.P Thorat, ex-Chairman, NABARD, inter alia, to examine various options open for the growth and development of sugar economy and to suggest a blueprint of action, have submitted their report to the Government. An early decision on the findings of the report for implementation is essential, to arrive at short, medium and long-term perspective plans that would facilitate overall development of the sector.

26. Central Government made amendments in Clause 3(1) of the Sugarcane (Control) order, 1966 in November, 2008, providing for income realization/imputed value from the sale of by-products of sugar, such as molasses, bagasse and press mud to be taken into account as one of the factors while considering SMP of sugarcane. However, the Commission could not get required data in this regard.

27. Since the Commission submitted its Price Policy Report for Sugarcane for 2009-10 sugar season on 14th August, 2008, it has been observed that there has been considerable increase in input cost, especially on account of human labour among various major cane growing states. The wage rate in fact is around Rs.160 per manday in the state of Andhra Pradesh, Rs.148 per manday in Haryana, Rs.120 per manday in Karnataka, Rs.118-142 per manday in Punjab, Rs.140 per manday in Uttarakhand. The higher levels of wage rate in these states have been reported in the replies of the state Governments.

28. As in the past, the Commission had wide-ranging discussions with the State Governments, Farmers' Associations and other stakeholders on 6th & 7th August, 2009. Most of the farmers representing several states expressed the concern that sugarcane cultivation is gradually turning more expensive and that the increase in cost is not being compensated by proportionate increase in remunerative price in the form of Statutory Minimum Price (SMP). They have also highlighted that sugarcane being labour intensive cultivation, they are more often faced with problems of availability of labour and its increased cost. In particular, it was mentioned by them that the value of Bagasse, Molasses, etc, produced as by-products in the sugar factories, is to be accounted for in the determination of SMP for sugarcane. In this regard, it is clarified that already amendments have been made in the Sugarcane

Control Order in Clause 3 (i), that provide for the imputed value from the sale of by-products of sugar as a factor for recommending SMP of sugarcane. Despite the fact that area under sugarcane has declined in the current year of 2009-10 due to shift to other competing crops like wheat and paddy for expected higher returns, it is pointed out that total net sown area in the country being more or less around at 140 million hectares, area under sugarcane can be increased by means of inter-cropping with other appropriate crops. There was a demand from the farmers that some incentives may be given for farm mechanization. In this context, the Commission recommends that **credit and subsidy may be made available for increased farm mechanization, keeping in view the labour intensive nature of sugarcane cultivation and the emerging labour scarcity in the sector.**

29. Sugar mill owners focused on two critical areas in the management of production and distribution of sugar. One, they were of the view that the 10 percent levy obligations on the mill owners imposed by the Government for the Targeted Public Distribution System (TPDS) should be done away with, and that the Government might procure the required amount of sugar from the open market. Second, the release mechanism in place today for the regulated supply of sugar in the market is to be revoked in favour of market driven demand and supply for smoothening erratic price fluctuations. Majority of the mill owners were of the view that the state laws providing for the fixation of State Advised Prices (SAP) be suitably amended so that it may be abolished in view of its market distorting implications. It was pointed out by the mill owners that the radial distance between two sugar factories being at present 15 kms, it poses difficulties for the existing sugar mills both on account of inadequate sugarcane availability and under-utilization of their installed capacity. They further expressed their view that the distance of 15 kms was envisaged at a time when the economic size of a sugar plant was considered to be 2500 tonnes of cane crushed per day. Now that the capacity for most of the sugar factories has been scaled upto 5000 tonnes of cane crushed per day or above, they considered it urgent that a minimum distance norm of 25 kms be put in place as per the recommendations of the Tuteja Committee. The distance criterion of 15 kms which was demarcated long ago, does not have relevance for modern sugar factories with their relatively higher installed crushing capacities.

30. The average daily wage rates for agricultural labour have gone up by 41.86 percent for Orissa, followed by 27.67 percent for Andhra Pradesh, 21.31 percent for Haryana, 18.20 percent for Punjab, 17.78 percent for Tamilnadu, 17.34 percent for Kerala, 16.22 percent for Karnataka, and 16.09 percent for Bihar during the period June, 2008 to May, 2009. The extent of increase in average daily wage rates in these states is 16 to 42 percent. No state is reported to have recorded a fall in the average daily wage rate during this period. The states of Gujarat, West Bengal, Assam, Maharashtra, Madhya Pradesh, Rajasthan have their average daily wage rates increased 3 to 14 percent. Kerala has the highest wage rate at Rs.255.19 per manday during May, 2009, followed by Haryana at Rs.140.79 per manday, Punjab at Rs.127.49 per manday, Rajasthan at Rs.124.47 per manday, Tamilnadu at Rs.115.91 per manday, Andhra Pradesh at Rs.113.75 per manday. The state of Madhya Pradesh has the lowest wage rate at Rs.64.73 per manday among the major states. As far as the cost of living index of agricultural labourers is concerned, the index measured in terms of Consumer Price Index of Agricultural Labour has registered increase of the order of 8 to 13 percent in the majority of states.

31. The Wholesale Price Indices (WPI) with base 1993-94=100 for farm inputs during the period August, 2008 to July, 2009 reveal that the WPI has dropped by (-) 7.50 percent for electricity (for irrigation purposes), by (-) 2.26 percent for lubricants, by (-) 5.88 percent for high speed diesel oil and by (-) 26.27 percent for light diesel oil. The change in WPI for high speed diesel oil in the negative terrain during the period August, 2008 to July, 2009 results from the fact that the increase in WPI for high speed diesel oil from 451.1 in February, 2009 to 481.4 in July, 2009 has not reached on an average the level of WPI in the year 2008. Similarly, the WPI of light diesel oil has increased from 533.5 in February, 2009 to 629.8 in July, 2009, and this level of increase is still less than the level attained on average in the year 2008. Moreover, there has been an increase in WPI by 18.88 percent for pesticides, 3.72 percent for tractors, 8.48 percent for fodder, and 1.08 percent for cattle feed.

32. The Commission has received cost of cultivation/cost of production data for sugarcane from the Directorate of Economics and Statistics, Ministry of Agriculture for the year 2007-08 in respect of major sugarcane growing states of Andhra Pradesh, Haryana, Karnataka, Maharashtra, Tamilnadu, Uttar Pradesh and

Uttarakhand. The comparative analysis of the actual cost data for sugarcane for two years of 2006-07 and 2007-08 brings out that the paid out cost including family labour (A2+FI) per hectare has recorded increase in all the states excepting Haryana, Karnataka and Uttarakhand where it declined by (-)16.08 percent, (-) 29.10 percent and (-) 21.46 percent respectively. In these states the decline in paid out cost including family labour is due to the proportionate decline in the cost on account of inputs for the year 2007-08 as against 2006-07. It is remarkable to mention here that the drop in A2+FI cost per hectare in the states of Haryana and Karnataka is accompanied by drop in the yields by (-) 16.87 percent and (-) 1.82 percent respectively. The per quintal cost of production has registered increase in the states of Andhra Pradesh, Haryana, Uttar Pradesh with remaining states of Karnataka, Maharashtra, Tamil Nadu and Uttarakhand reporting the actual decline in the cost of production. The states of Andhra Pradesh, Haryana and Uttar Pradesh have their yield rates decreased by (-) 6.83 percent, (-) 16.87 percent and (-) 7.70 percent respectively and this explains the increase in the respective cost of production of these states. The order of increase of yield of sugarcane for the year 2007-08 ranges between as low as 1.08 percent for Maharashtra and as high as 14.08 percent for Uttarakhand. The per quintal cost of production has gone down for the states of Karnataka, Maharashtra, Tamil Nadu and Uttarakhand by (-) 23.83 percent, (-) 4.82 percent, (-) 6.10 percent and (-) 12.96 percent respectively and these states have undergone increase in their yields excepting Karnataka which has a decline in yield by a mere (-) 1.82 percent.

33. The per quintal implicit price in terms of the prices prevalent at the village level or thereabouts at the time of harvest for the year 2007-08 was maximum at Rs.120 for the state of Haryana and minimum at Rs.75 for Maharashtra, with the rest of the sugarcane growing states reporting implicit price around Rs.100-109 per quintal.

34. In order to arrive at the likely cost of production of sugarcane in different sugarcane growing states of Andhra Pradesh, Haryana, Karnataka, Maharashtra, Tamil Nadu, Uttar Pradesh and Uttarakhand for the year 2010-11, the Commission has as usual utilized the base level data for the year 2007-08 and that for the preceding years of 2005-06 and 2006-07. In other words, the Commission built up

its projection for the year 2010-11 for each state by averaging the projections separately carried out on each of the years of 2005-06, 2006-07 and 2007-08. Before arriving at the state level projections of cost of production for the year 2010-11, the per hectare available input costs are projected based on several series of data on wage rates, wholesale price indices of basic farm inputs, seed prices, fertilizer prices etc. The trends of possible movement of input prices being crucial to estimating cost of production per quintal, the Commission to the extent possible takes account of the updated data on prices of different inputs and computes for each state weighted composite input price indices, the weights being a share of each input in total operational cost net of interest. The weighted composite input price index so estimated for the year 2010-11 indicates on an average how much input price in general is expected to go up for the year 2010-11, compared to each of the last three 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.

35. On the basis of trends of movement of input prices observed for different states, it is noted that the overall composite index for input prices would go up by 32 percent for Andhra Pradesh, 42 percent for Haryana, 31 percent for Karnataka, 16 percent for Maharashtra, 26 percent for Tamil Nadu, 17 percent for Uttar Pradesh and 64 percent for Uttarakhand in the ensuing year of 2010-11 compared to the base level price for the year 2007-08. It is not out of place to point out that the major share in the increase of over-all input price index is constituted by cost on account of human labour. In this context, it should be kept in view that sugarcane is a highly labour intensive cultivation with 60 to 70 percent of total operation cost being on account of the component of human labour.

36. The C2 cost of production of sugarcane in respect of various states for the year 2010-11 is projected to an average of Rs.134.44 per quintal for Andhra Pradesh, Rs.114.43 per quintal for Haryana, Rs.74.60 per quintal for Karnataka, Rs.96.23 per quintal for Maharashtra, Rs.95.89 per quintal for Tamil Nadu, Rs.79.91 per quintal for Uttar Pradesh and Rs.82.54 per quintal for Uttarakhand. The weighted average cost at all India level works out to Rs.90.12 per quintal. This all

India estimated figure of Rs.90.12 per quintal is unadjusted in the sense that this cost has been arrived at without making allowance for state specific recovery rates. The Commission until the last sugarcane price policy report of 2009-10 had been using the basic recovery rate of 9 percent as per the decision made by the Government sometime in the past. However, the basic recovery rate of 9 percent has been changed to that of 9.5 percent in the announcement of SMP of sugarcane for the year 2009-10 at Rs.107.76 per quintal linked to 9.5 percent recovery. The adoption of 9.5 percent recovery rate has already been communicated to the Commission by the Government of India. When adjusted for basic recovery rate of 9.5 percent and using state specific average recovery rates the per quintal C2 cost of production for 2010-11 works out to Rs.126.45 for Andhra Pradesh, Rs.109.81 for Haryana, Rs.70.17 for Karnataka, Rs.77.48 for Maharashtra, Rs.97.95 for Tamil Nadu, Rs.81.63 for Uttar Pradesh and Rs.80.01 for Uttarakhand, the adjusted all-India weighted average C2 cost of production works out to Rs.85.66 per quintal.

37. Several State Governments have furnished estimates for cost of production for the year 2007-2008 and 2008-09 and 2009-10. The estimates were closely examined for comparison with corresponding cost estimates under Comprehensive Scheme available for the year 2007-08 from the Directorate of Economics and Statistics. The cost of production of sugarcane per quintal for the state of Andhra Pradesh is more or less equal both in the state replies and in the CS survey: it stands at Rs.106 in the CS estimates vis-à-vis Rs.105 in the state reply. When adjusted for comparability criteria this more or less same per quintal cost of production figures in both the data sets for Andhra Pradesh closely parallel their respective yield figures which were 783 quintals per hectare in CS estimates and 800 quintals per hectare in the state reply. In the case of Haryana, the state reply furnishes the cost of production of Rs.105.52 per quintal as against Rs.97 per quintal in the CS estimates. This difference in per quintal cost of production for Haryana is due to higher input cost reported in the state reply compared to that given in the CS estimates. Both the state replies and the CS estimates for Maharashtra give about the same per quintal cost of production of Rs.76 for the year 2007-08 despite the differences in per hectare cost of cultivation, which is higher on the side of CS estimates. However, the same level of cost of production in both the data sources is due to relatively higher yield and per quintal cost of cultivation given in the CS

estimates that balance both lower yield and per quintal cost of cultivation given in the state reply. Tamil Nadu has recorded lower per quintal cost of production in the state reply at Rs.62.18 than in the CS estimates at Rs.73.45, mainly due to relatively higher per hectare cost of cultivation given in the CS estimates compared to that in the state reply.

38. Finally arriving at the cost of production at all India level, the Commission has taken into account both marketing and crop insurance premium charges as part of input cost together with transportation cost which is already taken into account in case of sugarcane. The transportation charges for sugarcane in its conveyance from farm to the nearest purchase centre or mill gate, whatever the case may be, have been compiled state-wise by various modes and the exercise sums up that the average transportation cost at all India level at present would not exceed the level of Rs.13.36 per quintal for the sugar season 2010-11. There might be variations in the transportation cost across the states and across the regions within each state, but the fact remains that the overall transportation cost at all India level is in no way likely to touch beyond the mark of Rs.13.36 per quintal, as fixed in the last sugar season during 2009-10. As far as marketing charges are concerned it is noted that in regard to the sugarcane crop, no market charge is involved in view of sugarcane being delivered over to the mill owners by the farmers. That is the reason why none of the State Governments in their replies have furnished data on account of marketing charges.

39. On the question of crop insurance premium of sugarcane, it is worth mentioning here that most of the State Governments like Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka have not furnished any crop insurance premium as in these states crop insurance policy in sugarcane is either not in place or the farmers have not availed themselves of it. This is also the case for Punjab, Tamil Nadu and Uttarakhand. Only the states of Uttar Pradesh and Maharashtra have provided some information on insurance premium for sugarcane and this amounts to Rs.3.5 per quintal for Maharashtra and Rs.1.10 per quintal for Uttar Pradesh. Going by the weighted average of crop premiums for these two states with the weights being their respective areas, it comes to Rs.1.79 per quintal. This has been generalized for all the sugar growing states as a whole in the absence of reliable data on crop

insurance. This adhoc method based on limited information from the state Governments would continue to be adopted until farm level information is collected and compiled through redesigned schedule by the Directorate of Economics and Statistics, Department of Agriculture & Cooperation in accordance with the approval of the recommendations of the Alagh Committee Report by the Government of India. The overall per quintal C2 cost of production at all India level works out to Rs.100.81 by adding transportation cost of Rs.13.36 per quintal and insurance premium of Rs.1.79 per quintal to the adjusted per quintal C2 cost of Rs.85.66 at basic recovery of 9.5 percent.

40. As regards the likely increase in overall cost of production of sugarcane for the year 2010-11 compared to the preceding year of 2009-10, it is estimated to be in the neighborhood of 11.0 percent. On the price front, the wholesale prices of sugar in absolute terms have seasonal swings and this is evident in the behaviour of wholesale price of sugar which varied between Rs.14.5 per kg and Rs.19.5 per kg during 2007-08 and also varied between Rs.18 per kg and Rs.28 per kg during 2007-08 in different markets of the country. It has further gone up to about Rs. 30 per kg during August, 2009 (up to 12th August, 2009). Given the situation of spiralling prices of sugar, Government have taken various measures in order to improve the supply position in the country. These are: (i) import of raw/ refined sugar at zero duty, (ii) imposition of stock limits and increased levels of release of non levy sugar, etc.

41. In arriving at SMP, the Commission considers not only cost of production but also several other factors including the 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, and inter-crop price parity. Considering the increase in input costs, there may be a justification for some increase in SMP of sugarcane for 2010-11 over the government announced SMP of Rs.107.76 per quintal in 2009-10.

42. Thus, considering all the relevant factors and the long run interest of both sugarcane growers and sugar industry, the Commission recommends that **the statutory minimum price (SMP) of sugarcane for 2010-11 sugar season be fixed at Rs. 117/- per quintal for a basic recovery rate of 9.5 per cent subject to a premium of Rupees 1.23 for every 0.1 percentage point increase in the recovery above 9.5 per cent. At the all India average recovery rate of 10.30 per cent achieved in 2007-08 season, the SMP recommended comes to Rs. 126.84/- per quintal.**

(S. MAHENDRA DEV)

CHAIRMAN

(R. VISWANATHAN)

MEMBER

(RAJ VIR SINGH)

MEMBER

(K. G. RADHAKRISHNAN)

MEMBER SECRETARY

24th AUGUST, 2009

Commission for Agricultural Costs and Prices
Supplementary Note on Recommendation of Sugarcane Price for the
Year 2010-11

The Commission for Agricultural Costs and Prices had submitted its price policy report for sugarcane for 2010-11 sugar season on August 24, 2009 recommending statutory minimum price (SMP) of sugarcane at Rs.117 per quintal for a basic recovery rate of 9.5 percent subject to a premium of Rs.1.23 for every 0.1 percentage point increase in the recovery above 9.5 percent. In the perspective of the supplementary note for sugarcane price for the year 2009-10 that recommended the fair and remunerative price at Rs.129.84 per quintal at 9.5 percent recovery, the Commission proposes to recommend fair and remunerative price of sugarcane for 2010-11 in accordance with the revised Sugarcane (Control) amendment order 2009 that, among other things, provides for reasonable margin for sugarcane growers on account of risk and profit. The Commission having taken into account the entire scenario of sugarcane and sugar in relation to their respective quantum of production and prices, makes the following observations:

In the report submitted on 24th August, 2009, the Commission arrived at the overall per quintal cost of production at all-India level to the tune of Rs.100.81 per quintal that included the per quintal transportation cost of Rs.13.36 and insurance premium of Rs.1.79 per quintal and the adjusted per quintal C2 cost of Rs.85.66 at basic recovery of 9.5 percent. Going by the trends of production of sugarcane, it is observed that the sugarcane production has shown downward growth to (-)2.06 percent in 2007-08 compared to the year 2006-07 and further to (-)21.33 percent in 2008-09, compared to the year 2007-08. The area coverage has declined to (-)12.9 percent in 2008-09, vis- a-vis the preceding year. Since several parts of the country were affected by drought like conditions in 2009-10, it is expected that sugarcane production may not attain the levels of production achieved for the years 2006-07 and 2007-08. Since there has been a decline in area coverage under sugarcane, there is likelihood of farmers shifting to other

competing crops like paddy and wheat in the hope of comparatively better returns. With sugarcane production registering declines in recent years, the prices of sugar have recorded increasing trends. Keeping all these in view, the Commission considers it appropriate and rational to make allowance for profit margin of 15 percent on the total cost of production at Rs.100.81 per quintal. This comes to Rs.115.93 per quintal. Further, some margin on account of risk to the extent of 20 percent is made on Rs.115.93 per quintal, and this amounts to Rs.139.12 per quintal at the basic recovery of 9.5 percent. This margin of risk has been considered depending upon stocks and prices of sugar, and the likely production of sugarcane for the year 2010-11. Moreover, there is a possibility of sugarcane production looking up two years on from now, i.e. for the year 2011-12, given the cyclical nature of the sector.

Having considered all the relevant factors on the current status of sugarcane and sugar economy of the country, the Commission recommends that the fair and remunerative price of sugarcane for 2010-11 may be revised as Rs.139.12 per quintal at 9.5 percent recovery, subject to a premium of Rs.1.46 for every 0.1 percent increase in the recovery above 9.5 percent. At all-India average recovery rate of 10.16 percent achieved in 2007, the fair and remunerative price recommended comes to Rs.148.79 per quintal.

(S. MAHENDRA DEV)
CHAIRMAN

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January 18, 2010.

