COMMISSION FOR AGRICULTURAL COSTS AND PRICES REPORT ON PRICE POLICY FOR SUGARCANE FOR THE 2003-04 SEASON

In this report, the Commission for Agricultural Costs and Prices presents its views on Price Policy for Sugarcane for the 2003-04 Season. The Commission recommends that

- (i) the statutory minimum price (SMP) of sugarcane payable by sugar factories for the 2003-04 season be fixed at Rs. 65.50 per quintal, linked to a basic recovery of 8.5 per cent subject to a premium of Rs. 0.77 for every 0.1 percentage point increase in the recovery above that level. At the average all-India recovery rate of 10.2 per cent for the last 5 years, the SMP recommended is Rs. 78.60;
- (ii) the Government should consider creation of a buffer stock of 2 to 2.5 million tonnes of sugar and also find ways and means to provide soft loans to the sugar industry for nursing another 2 to 2.5 million tonnes of excess stock of sugar; and (Para 21)
- (iii) the new Sugarcane Pricing Policy be evolved quickly and implemented without further loss of time, so as to put an end to the existing system of arbitrary pricing of sugarcane in various states.

(Para 23)

- 2. The Commission submitted its report on price policy for sugarcane for the 2002-03 season on November 22, 2001 recommending the SMP payable by sugar factories at Rs.64.50 per quintal, linked to a basic recovery of 8.5 percent and subject to a premium of Rs.0.76 for every 0.1 percentage point increase in the recovery above that level. The Government fixed the SMP on July 29, 2002 at the level recommended by the Commission. (Table 1)
- 3. The production of sugarcane, which reached an all-India peak level of 299.32 million tonnes in 1999-00, decreased marginally to 299.21 million tonnes in 2000-01. This happened despite significant overall increase in area under sugarcane from 4.22 million hectares in 1999-00 to 4.30 million hectares in 2000-01, implying substantial decline in overall yield. Decrease in yield during 2000-01 was mainly confined to the states of Uttar Pradesh and Maharashtra, the two largest producing states. Although area under sugarcane also declined mainly in Uttar Pradesh, Andhra Pradesh and Gujarat, this was more than counterbalanced by an increase in area in other states. The net outcome of the disparate movement of area and yield across states has been the most desirable one, namely, stability in production of sugarcane at the national level. (Table 2)
- 4. The stability in the production of sugarcane experienced during 1999-00 and 2000-01 was, however, expected to receive a minor jolt during 2001-02 season due to drought and scarcity of irrigation water faced by a couple of states in the tropical region, namely, Maharashtra and Andhra Pradesh. After several revisions, the Directorate of Economics and Statistics (DES) has placed the all-India sugarcane production during 2001-02 at 292 million tonnes, about 7 million tonnes lower than the previous season. However, data received by the Commission from the main sugarcane growing states indicate that production of sugarcane during 2001-02 may have been of the order of 297 million tonnes, only about 2 million tonnes lower than the previous season. As a matter of fact, data from the states as well as the DES indicate that there has been little or no decrease in area under sugarcane during 2001-02 season, implying that the marginal decline in production has been entirely due to weather-induced reduction in yield, and that too confined to a few states, namely, Uttaranchal, Maharashtra and Karnataka.

- In its discussion with the states, the Commission has been given to understand that sugarcane production during the current season (2002-03) has suffered a setback, primarily due to loss in yield caused by water-stress following delayed/deficient rainfall in the 2002 south-west monsoon. There was almost no rains in the month of July, particularly in the northern states. Uttar Pradesh, the largest sugarcane producing state, was severely affected by drought. There was also drought in other major sugarcane producing states, such as, Harvana, Punjab, Karnataka and Andhra Pradesh. The states of Maharashtra and Gujarat, however, had received relatively good rainfall. Though sugarcane is grown under irrigated conditions, deficient rainfall had adverse effect on growth of standing sugarcane crop. Depletion of underground water coupled with shortage of surface water as well as electricity prevented farmers from resorting to adequate and frequent irrigation as required. This affected normal tillering and also shortened inter-nod lengths. Though accurate data is not yet available, the Commission's preliminary assessment based on the states' perception is that production loss during 2002-03 would be about 10 percent in Uttar Pradesh, 20 percent each in Punjab, Haryana and Karnataka and about 5-6 percent in Andhra Pradesh. The overall loss is currently estimated at about 23 million tonnes (10 million tonnes in Uttar Pradesh, 1.5 million tonnes each in Punjab and Haryana, 9 million tonnes in Karnataka and 1 million tonnes in Andhra Pradesh) over the previous year. Thus, the overall production of sugarcane during 2002-03 is likely to be 274 million tonnes, a decline of about 8 percent over the previous year. According to estimates prepared by the Deptt. of Agriculture and Cooperation (DAC), sugarcane covered an area of about 4.4 million hectares during 2002-03 as compared to the previous years' coverage of 4.3 million hectares. The anticipated loss in production during 2002-03 is, therefore, attributable entirely to decline in yield of sugarcane to 62.3 tonnes per hectare from 69 tonnes in 2001-02 season. Shortfall in sugarcane production during 2002-03 is likely to reduce sugar production only marginally over the previous year, since drawal rate of cane is likely to be high and close to capacity, which in 2001-02 was placed at over 17.6 million tonnes. At 10.5 percent recovery, this translates into a drawal rate of about 61 percent or about 168 million tonnes of cane. This is guite plausible, since there is a precedence in 1995-96 when the drawing rate of sugar mills reached almost 62 percent. If that happens, production of gur and khandsari during 2002-03 may decline substantially. (Table 3)
- 6. In view of a very strong and sustained planting intentions expressed by the sugarcane growers over the past 5 years, the Commission anticipates that, despite mounting cane arrears and delayed cane payments, sugarcane acreage and production during the 2003-04 season, assuming normal weather, may exceed 4 million hectares and 300 million tonnes respectively. This assessment is based on the fact that sugarcane is still the best paying crop as compared to other crop-combinations and that, unlike other crops, selling sugarcane is not a problem for most growers.
- 7. Thus, on the production front, the overall situation continues to be satisfactory, with growth sustained and instability virtually eliminated after the mid-1990s. However, the performance on the yield front leaves much to be desired, particularly in the sub-tropical region. There appears to have been a sharp deceleration in yield growth in Bihar, Haryana and Uttar Pradesh during the 1990s. Even in the tropical region yield growth has been less than satisfactory in Maharashtra and Tamil Nadu, with Gujarat having witnessed a decline in yield in the 1990s. This is a matter of concern, particularly at this juncture when the sugar economy appears to be vulnerable to low sugar prices, which can not sustain payment of high administered cane prices, determined mainly on considerations of cost of production, which in the absence of significant growth in yield has tended to go up every year due to normal increases in input prices.
- 8. Production of sugar, which jumped to a record level of about 18.2 million tonnes in 1999-2000 from about 15.5 million tonnes in the previous year, had reached a new record level of over 18.5 million tonnes in 2000-01 season (October-September). Compared to the previous peak production of 16.4 million tonnes in 1995-96, the production during 2000-01 was about 12.8 percent higher. Based on data reported so far (upto June 2002), it appears that 2001-02 sugar season will end up with production of a little over 18 million tonnes, same as predicted in the preceding report of the Commission. Based on provisionally estimated cane production at the lower level of 274 million tonnes and assuming cane availability at 61 percent and anticipated recovery at 10.5 percent, it

appears that production of sugar during 2002-03 could decline to 17.5 million tonnes. An anticipated decrease in production by about half a million tonnes is not, however, a matter of concern, since the problem facing the sugar industry during the past 5 years has been one of excess supply and low prices caused by very large inventories. (Table 4)

- According to the balance sheet of sugar prepared in the Directorate of Sugar, Deptt, of Food and Public Distribution, opening stocks of sugar fell sharply from over 7.9 million tonnes on October 1, 1996 to about 5.4 million tonnes on October, 1998, which marked the end of the preceding sugar cycle and the beginning of an upturn in a new cycle. Since then the sugarcane economy has not witnessed the downturn so far and as a consequence, the opening stocks of sugar have risen every year and is estimated to be precipitously high at about 10.4 million tonnes on October 1, 2001. This represents about 64 percent of the previous year's consumption or about 7.5 months' projected consumption for the following year, while the ideal requirement is only about 3 months' consumption. The Commission's projections suggest that opening stocks of sugar as on October 1, 2002 may rise marginally to about 10.6 million tonnes, before moderating downwards to about 9.2 million tonnes at the beginning of the 2003-04 season. It is quite clear from the balance sheet that the rising stocks of sugar since October, 1998 has been primarily the result of production exceeding consumption, although large scale imports of sugar totaling more than 2.3 million tonnes (as per DGCIS data) contributed significantly to the phenomenon. In this context, it needs to be mentioned that there are a couple of infirmities in the way the Directorate of Sugar prepares its balance sheet for sugar. First, the data on imports and exports of sugar do not appear to tally with those of the DGCIS. Second, imports are not included in total availability although exports are deducted to arrive at the closing stocks. Presumably, and perhaps unavoidably, imports are treated as consumed. However, this procedure avoidably understates both availability and consumption. In order to rectify these deficiencies and to provide a more realistic picture of availability, consumption and opening stocks, the Commission has reconstructed the sugar balance sheet for the period 1996-97 to 2002-03. It needs to be noted that the reconstructed balance sheet does not radically alter the opening stocks reported by the Directorate. Nevertheless, it needs to be mentioned that the reconstructed balance sheet needs further refinements through allocation of imports to consumption and stocks for which data are not presently available. In order to calculate and project estimates of supply and demand realistically and perhaps predict prices more accurately, it is essential that some mechanism is established to monitor imports and their offtake. (Table 6 & Annexure- I)
- It needs to be noted that the projected opening stocks of sugar at 9.2 million tonnes as on October 1, 2003 is based on an optimistic assumption about both the drawal rate of cane at 61 percent and an average recovery rate of 10.5 percent. It is well known that a short crop induces the gur and khandsari producers to offer stiff competition to the sugar mills. It is therefore quite possible that drawal rate of cane by sugar mills may go down to 59 percent during 2002-03. Recovery rate also could suffer marginal decline due to water-stress suffered by the standing crop in many states. Both these prospects could reduce sugar production during the 2002-03 season to about 17 million tonnes as against 17.5 million tonnes projected earlier. This should come as a bit of relief to the sugar industry since inventories could go down by half-a-million tonnes at the beginning of the 2003-04 sugar year. However, there is no relief in sight on the demand front. Consumption, which has been growing at a robust rate of about 4.5 to 5.0 percent per annum (growth of direct consumption by households has been higher at about 7 percent per annum), can not be stretched more without eroding already low price realisation from sugar. Exports projected at 1 million tonnes during 2002-03 also look optimistic in view of the sustained poor price sentiment in the global markets. However, the amendment to the SDF Act, 1982 w.e.f. May 28, 2002 and the rules framed thereunder w.e.f. June 21, 2002 paying the way for the sugar mills to claim reimbursement of internal transport and freight charges on export shipments should be helpful in realizing the projected export quantity. Nevertheless, there are worries on the import front. Although, low domestic prices of sugar coupled with an import duty of 60 percent plus a countervailing duty of Rs.850 per tonne do not permit any import of refined sugar, media reports suggest that large scale import of duty-free rawsugar is taking place under the Advance Licensing Scheme (ALS) incorporated in the EXIM Policy. Though the raw-sugar processed under ALS is meant for export, it is apprehended that the import of raw sugar of high polarization (i.e. high sucrose content of as much as 99.5 percent), along

with the permissible processing loss allowance of 20 percent, as against 5 percent prior to May, 2002, is enabling importers to offload significant quantities of refined sugar in the domestic market. If true, this will not only add to the glut in the market but would also hamper efforts for boosting export of indigenous sugar. This is a matter of concern to the domestic industry. The Commission also shares this concern, which calls for a review of the EXIM Policy relating to duty free import of raw sugar, having high sucrose content, coupled with needlessly high input-output norm. Taking into consideration all aspects of the emerging situation, it appears that 2003-04 sugar season would begin with a stock of at least 9 million tonnes of sugar.

(Annexure-II)

- 11. Persistently high levels of stocks of sugar, season after season, have had several adverse consequences on the sugar economy, which are manifested in the form of severe cash-flow problems for the sugar factories, mounting cane price arrears, persistently low sugar prices and consequently, low and declining price realisation from sugar sales. Collectively, these have thrown the sugar economy in a crisis situation, so much so that the long awaited decontrol of the sugar sector has come under threat. At the heart of the crisis is, of course, the price of sugarcane which has tended to be flexible only in one direction, upward.
- 12. It is obvious that cash locked up in large stocks has resulted in mounting cane price arrears. Indeed over the past few years, arrears situation has worsened. Taking 15th May of each season as the cut-off date, by which time the sugar factories are expected to clear most of the cane payments, cane arrears have grown fromRs.510 crore in 1997-98 to Rs.805 crore in 1998-99, Rs.1134 crore in 1999-00, Rs.1610 crore in 2000-01 and further up to Rs.2596 crore in 2001-02 season. As a proportion of cane price payable, cane price arrears as on 15th May of these years were 7.5, 10.5, 14.3, 14.2 and 20.1 percent respectively. Although cane arrears showed substantial reduction by 15th July of each year, these were still very high from the perspective of the cane growers, who need cash not only for day to day sustenance but also for investing in the next crop. In the absence of any arrangement for consumption loans or adequate provision for crop loans, it is quite understandable why farmers get angry at cane arrears. In the past, prior to 1998-99 season, affected farmers used to express their frustration by switching to crops other than sugarcane. Since then, it appears, the farmers have lost that option because of adverse movement of relative prices of alternative crops. So, the farmers have perforce to grow sugarcane and tolerate the burden of delayed and inadequate cane payments. (Table 8)
- 13 The problem of cane arrears is not, however, attributable to any mala fide intention on the part of the sugar mills. As a matter of fact, the stringent provisions of the Sugarcane (Control) Order. 1966, particularly the sub-clause 3(8) and 9(aa) do not leave any scope for any dilatory tactics on the part of the sugar mills. On the contrary, these statutory provisions have this year forced many mill owners to approach the High Court in several states to permit them to sell more sugar than is allowed by the Central Government under the free sale release mechanism, not for making a profit but for clearing cane payments. According to the Sugarcane Control Order, if the mills do not pay farmers within a stipulated time, the state governments can proceed to recover from the sugar mills the cane dues as if these were arrears of land revenue, a process which empowers the state governments to issue non-bailable arrest warrants against the defaulters. The prospect of dealing with such stringent measures by the mills have had salutary effect on the magnitude of cane payments which, it needs to be pointed out, had witnessed a quantum jump in the past two years even though the volume of cane crushed has by and large remained the same. However, the fallout of such desperate solutions to cane arrears has manifested in terms of higher sales of sugar in a disorderly fashion in a market which was already witnessing plummeting open market prices. Plummeting prices, in its turn, had tended to erode the value of stocks pledged with banks. As a result, the banks have reportedly not only stopped further lending but also demanded a refund of the excess payments in working capital. With virtually no bank credit and little or no opportunities to sell at a profit, the mills find themselves in an impossible situation, namely, to find alternative ways to get cash to pay off not only the remaining cane dues but also the bank dues.

- 14. Offloading of excess sugar in the open market, beyond the free sale quotas, permitted by the courts, has not only depressed open market prices but also undermined the credibility of the Government's regulated release mechanism for free sale sugar. It may be recalled that the mechanism was designed to hold the price line at a level which would ensure adequate profits to sugar mills, in addition to the recovery of the losses incurred by them in making available cheap levy sugar to the Government for supplying to the public distribution system. With the integrity of free sale mechanism having been compromised by the court-ordained quotas and also perhaps by clandestine sales reported in the media, it has not been possible to hold the price line at a reasonable level.
- **15.** It needs to be mentioned that the free sale mechanism was experiencing trouble even before the intervention of the courts. Following the Government's announcement in the Budget for Financial Year 2001-02 to set up future/forward market in sugar, a step necessary for full decontrol of sugar announced earlier, it was decided in consultation with the industry to make free sale release of sugar for each sugar factory on quarterly basis, instead of monthly basis as was hitherto being done. Accordingly, quarterly release to be effective from January 2002 was announced in advance. However, no one reckoned the fall out of the measure. Even before the first quarterly release could come into operation, there was a fall in the prices. This prompted the Government to make a slight modification to the quota by splitting it into two halves of 45 days. The prices remained in slump or even declined. The Government repeated the experiment by announcing a quarterly release for April-June 2002. As the prices continued to fall and touched a six-year low in June 2002, the Govt. reverted to the monthly release w.e.f. July, 2002. It may be recalled that a change to quarterly release, and perhaps to bi-annual in due course, was a prelude to a transition from free sale release mechanism to futures/forward trading of sugar, since monthly release was considered, correctly, incompatible with the former. As a matter of fact, the Goyt, had made advance preparation for such a transition by reducing the proportion of levy sugar in stages to 10 percent w.e.f. 1.3.2002 and issuing licenses to three companies to set up futures exchanges for sugar. Now it appears that with the monthly release mechanism back in place, introduction of futures scheduled at the beginning of the 2002-03 season would have to be shelved indefinitely. Although some people in the industry seem to believe that the futures market and the sugar quota release mechanism can coexist, it is extremely doubtful whether the volume of trade and the number of participants in such a hybrid system would be large enough to enable it to perform the twin functions of price discovery and hedging of risks efficiently. It needs to be realized that futures trading in itself can not arrest a price crash, since this cannot alter the fundamentals of the physical market, namely, supply and demand, which together determine prices in the market place. In the present context of an imbalance in supply and demand, with the former being driven by excess stocks and high level of production and the latter relatively stable, there is absolutely no way prices can be propped up by futures trading alone. (Table 20)
- 16. Price situation of sugar (and for that matter of other sweeteners, namely, gur and khandsari) continues to remain grim. Barring a minor upturn during 1999-2000 sugar year, prices of sugar have remained virtually static over the past 5 years. The wholesale price index (WPI) for sugar (with base:1993-94=100) averaged 135.2, 135.7, 141.2, 138.9 and 132.8 during 1997-98, 1998-99, 1999-2000, 2000-01 and 2001-02 (October-July) sugar year. Looked in conjunction with the all-commodities WPI at 136.7, 142.7, 149.9, 159.7 and 162.5 in the corresponding periods, it appears that the real price of sugar (WPI of sugar deflated by all-commodities WPI) has been continuously falling since 1997-98 and is currently over 15 percent lower than that in 1996-97. Reflecting faithfully the direction of WPI of sugar, all-India price realisation from free sale sugar averaged at Rs.1335, Rs.1320, Rs.1339, Rs.1318 and Rs.1297 per quintal respectively in 1997-98, 1998-99, 1999-00, 2000-01 and 2001-02. A similar slump in the prices of gur and khandsari is also discernible for the past 5 years. (Table 10)
- 17. In view of the emerging stocks situation discussed earlier and the apparent breakdown of the regulated free sale release mechanism, it appears that there is a slim chance of sugar prices looking up in the near future, unless there is a radical reversal in the behaviour of the global sugar prices, thereby boosting export volumes and unit price realisation. The global prices in recent months of calendar 2002 have shown a tendency to move in a narrow range, but at levels much below the

average for calendar 2001. For example, the international reference price of refined white sugar (London International Financial and Options Exchange, Contract No.5, FOB Europe, Spot), which averaged at \$249 per tonne in calendar 2001, moved in the range of \$221-238 per tonne during February-July 2002, after having risen sharply to \$262 in January 2002. This gives an average price of \$233 per tonne or Rs.11300 per tonne at the current exchange rate of about Rs.48.50 per dollar. Even after adding the transport subsidy of about Rs.500-600 per tonne, price realisation from export does not become attractive enough for a large scale export push. It needs to be noted that domestic realisation from free sale sugar during 2001-02 season has so far averaged around Rs.13000 per tonne, much higher than the average export price realisation. Nevertheless, there are reasons to be modestly optimistic on the export front, since the DGCIS data for October-March 2001-02 shows an export realisation of as low as about Rs.11800 per tonne from an export volume of over 5.4 lakh tonnes and that too without any transport subsidy, which has become operational only in late June 2002. This means that the Indian Sugar Mills, particularly the ones having relatively lower costs, saddled as they are with huge stocks that ipso facto entails high carrying costs, currently of the order of about Rs.2000 per tonne per year, are motivated enough to pursue an aggressive exports. The transport subsidy, though delayed, would add to motivation. (Tables 12 & 13)

- 18. There is also another reason for optimism on the export front, namely, highly unstable behaviour of international prices of sugar. As the LIFFE quotations show, currently spot quotes are much lower than the average of the past two calendar years, giving some hope that these may improve in the near future. However, such hopes need to be embellished by the current understanding of the fundamentals of the global sugar economy. According to FAO forecasts (May, 2002), world sugar production may reach 138.5 million tonnes (raw value) in 2002-03, up from 134.1 million tonnes in 2001-02, if current favourable conditions continue. FAO also forecasts world consumption to reach 136.2 million tonnes (raw value) in 2002 from 132.7 million tonnes in the previous year, an annual growth of 2.6 percent driven primarily by strong economic growth, particularly in the Far East and the Russian Federation. Nevertheless, FAO expects that considerable surpluses at the global level would keep prices weaker. Thus, there is yet no signs of early revival of the global prices.
- 19. In view of the discussion above, the Commission believes that export possibilities are fairly good even at the current global prices, and would be better if prices rise to above \$260 per gone. Nevertheless, it looks unlikely that annual exports could reach beyond 1 million tonnes on a sustained basis.
- Thus, neither the export route nor the prospective launching of futures market in sugar with 20. or without release mechanism, seem to be an answer to the fundamental problem of a large imbalance between supply and demand that the sugar economy is facing today. It should, however. be noted that the current imbalance in supply and demand is essentially due to excessive stocks already built up, since current consumption appears to have caught up with current production. Indeed, the CMIE projections of demand for sugar based on a modest annual GDP growth of 6.5 percent shows this going up every year during the 10th plan (2002-03 to 2006-7) by about 1 million tonnes, or about a little above 5 percent per annum. On this basis, the country's annual production would tend to fall short of demand in the 10th Plan, which can be easily made up by maintaining a reasonable growth in yield, without resort to expansion of area under cane. Thus, the solution to the current imbalance between supply and demand boils down to efforts at liquidating much of the current excess stocks and allowing no addition to stocks. The latter would require that wrong pricing policies do not keep on prodding cane growers to expand area under cane at the cost of sustaining and raising productivity. As mentioned earlier, the Commission expects the carry over stocks of sugar at the beginning of the 2003-04 season to be at about 9 million tonnes, assuming an export outgo of 1 million tonnes in the 2002-03 season. Assuming further that about 3 months' consumption or about 4.5 million tonnes would be the normal requirement for carryover stock, the excess stocks may be placed at about 4.5 million tonnes as on October 1, 2003. Roughly, this is the quantity of stocks whose malevolent effects on the sugar economy need to be focussed on in the immediate term and ways found to neutralize them.

- 21. Liquidating 4.5 million tonnes of sugar exclusively through exports would take at least four and a half years. Obviously, the industry can not wait that long without eroding its viability further. This leaves open the only other option, namely, creation of a buffer stock for which enough justification existed even before the present juncture; and since these have been discussed in the preceding few reports of the Commission, including that of the 2002-03 season, the Commission desists from repeating the same this time round. It needs to be mentioned, however, that the proposed buffer stock cannot take over the entire excess stock of 4.5 million tonnes, since @ of about Rs.2000 per tonne per year, the outgo from the Sugar Development Fund (SDF) would be very large at Rs.900 crore per year. The SDF, currently having a credit balance of only a little over Rs.1300 crore against a host of commitments for defraying expenditure on various developmental activities related to sugar, can not afford such heavy expenditure. Therefore, the size of the buffer stock has to be scaled down to 2 to 2.5 million tonnes. The remaining 2 to 2.5 million tonnes of excess sugar has perforce to be nursed by the industry on their own, perhaps with assistance from the Government in the form of soft loans, out of the SDF or some other source. The Commission, therefore, recommends that the Government should consider creation of a buffer stock of 2 to 2.5 million tonnes of sugar and also find ways and means to provide soft loans to the sugar industry for nursing another 2 to 2.5 million tonnes of excess stock of sugar.
- 22. The recommendation above, if accepted and implemented, would be a positive step towards eventual elimination of free sale release mechanism and an early transition to futures trade. However, this does not address the problem of poor realisation from sales of sugar under the current and emerging price scenario. Since very little can be done about prices, it is imperative to see that cost of production of sugar does not increase. At the present juncture, any increase in the cost of production is bound to cripple the industry by eroding export competitiveness on the one hand and slowing down domestic demand growth on the other. These considerations are now more urgent than before since industry margins can not take more battering. Therefore, the need of the hour is to exercise moderation in the rate of increase of cane prices on the one hand, and consolidation of efforts at cost reduction, most essentially, a sizable improvement in the recovery rate through initiatives both at the farm and plant levels.
- 23. There is scarcely a need for the Commission to go into the details of measures which are required for containing costs and perhaps reducing them, since some of these have been discussed in the preceding reports of the Commission and more of these have been discussed in some depth in the recently published Report of the Task Force on Sugar Industry for the 10th Five Year Plan 2002-07 (January, 2002). Nevertheless, the Commission would like to emphasise the need for expeditious action on one of the most vital areas, namely, final pricing of sugarcane. To put it briefly, the first in a sequence of measures that are needed is an action to end the practice of arbitrary pricing of sugarcane, popularly known as state advised prices (SAP), and replace the same with a rational system of pricing. Though considerable progress has been made in introducing such a system, the effort lately appears to have slackened. Considering that at the heart of most of the problems facing the sugar economy today is the arbitrary pricing of sugarcane practiced in the past, the Commission recommends that the new Sugarcane Pricing Policy be evolved quickly and implemented without further loss of time, so as to put an end to the existing system of arbitrary pricing of sugarcane in various states.
- 24. The Commission is happy to note that a number of states have realised the folly of arbitrary pricing of sugarcane unrelated to realisations from sugar sales. For example, the Government of Tamil Nadu had issued instructions to work out an advance price that could be paid against clause 5A of the Sugarcane Control Order over and above the SMP, instead of SAP, since the 2001-02 season. Similarly, Andhra Pradesh had given up SAP w.e.f. 2001-02 season; presently they ask the mills to pay a price linked to recovery, although this tends to be unreasonably high. In Karnataka also a SMP plus formula is being followed, although the final price tends to be higher than that is justifiable by realisation from sugar. The problem states, however, continue to be Uttar Pradesh, Uttaranchal, Punjab and Haryana, where SAPs were historically fixed at levels much higher than those implicit in the Sugarcane Control Order. These are now clearly unsustainable. Indeed, back of

hand calculations show that currently realisation from sugar is such that it can absorb only a cane price derived from recovery linked - SMP. As a matter of fact, both ISMA and NFCSF have suggested that *status quo* should be maintained in respect of SMP, until sugar prices improve.

- 25. The Commission, however, has little room for manoeuvre in view of Clause 3 (1) of the Sugarcane Control Order, 1966 which enjoins it to fix the minimum price of sugarcane, having regard to:
 - (a) the cost of production of sugarcane;
 - (b) the return to the grower from alternative crops and the general trend of prices of agricultural commo-dities;
 - (c) the availability of sugar to the consumer at a fair price;
 - (d) The price at which sugar produced from sugarcane is sold by producers of sugar; and
- (e) the recovery of sugar from sugarcane.
- 26. In the context of the above mandated requirements, it must be noted that the Commission recommends SMP taking into account (a) and (e) above, both beyond its control. The cost data are collected by the DES under the Comprehensive Scheme for Studying the Cost of Cultivation of Principal Crops in India. The Commission merely projects the base year data to the year of the report by a methodology that has been found to be efficient. It needs to be pointed out, however, that cost of cultivation of sugarcane is bound to increase every year as a result of normal increases in input prices. Therefore, in the absence of an equal growth rate of yields in recent years, cost of production of sugarcane has tended to increase. Slackness in the growth of yields could be compensated somewhat by better recovery, which, indeed, has happened in the past 3-4 years, although not of a magnitude large enough to have a significant impact in restraining the growth of cane cost per quintal of sugar. It also needs to be noted that a significant part of SMP is the cane transport cost, which does not lend itself to any reduction. As for the criterion at (b) above, the Commission routinely calculates the comparative returns per hectare from sugarcane and from other crop combinations with reference to respective SMP/MSP. A comparison of the returns shows that for all states, except Punjab and Haryana, and for almost every year, the gross return from sugarcane is far above those from other crop combinations. In spite of such superiority of sugarcane, farmers as well as state governments consider that SMP is too low. Such a perception is, of course, not based on facts. The SMP recommended not only covered the cost of production of cane in every major state in every year in the past, but also had in recent years improved its parity with the MSP for virtually all competing crops. In fact, the percentage increase in the SMP has in recent years also exceeded the increase in the WPI of sugar by a large margin. As for the requirement (c) above, this is considered relevant only for the levy price of sugar. With levy percentage having been brought down to 10% of production, requirement (c) is no longer very important. In any case, SMP recommended in the past scarcely exceeded cost of production plus transport cost. In so far as Clause 3(1(d) of the Sugarcane Control Order is concerned, the Commission has always made its recommendations on the SMP for sugarcane keeping in view the sugar prices and other aspects of the sugar economy, such as the likely growth of supply and demand and the implications of this for the profitability of the sugar industry. However, in its recommendation on SMP, no element of profit of the sugar industry was included, because it has always been understood that any such element would be taken care of by the excess realisation to be worked out under Clause 5A of the Sugarcane Control Order. In practice, however, the profitability aspect embodied in Clause 5A was totally sidelined by the state governments when they began announcing the SAPs. With realisation from sugar sales falling to abysmally low levels, it is perhaps imperative for the Commission now to explicitly take into account profitability the requirement of of sugar production implicit Clause (Tables 17 & 18) 3(1)(d).

- 27. An explicit consideration of profitability of sugar production essentially boils down to a comparison between cost of production of sugar and realisation from sugar sales. This is best illustrated with actual data on costs and prices for the 2001-02 sugar year. For example, ex-factory all-India levy price of sugar was fixed at about Rs.1192 per quintal after a negative adjustment of Rs.57 per quintal towards realisation from sale of molasses. There is no profit element in the levy price. Thus, the cost of production of sugar during 2001-02 season could be taken as Rs.1249 per quintal, based on all-India weighted average SMP of Rs.78.32 per quintal of cane linked to all-India average recovery of 10.21 percent. Average realisation from free sale sugar as on May 2002 was estimated at about Rs.1297 per quintal. This has reportedly come down to Rs.1250 per quintal by September, 2002. Thus, the average realisation from sugar sales during 2001-02, assuming levy quota at 10 percent, comes to about Rs.1250 per quintal, almost the same as the cost of production. Thus, there is no profit at all from sugar sales during 2001-02. As a matter of fact, many mills would have incurred substantial losses per quintal of sugar sales since cane prices actually paid by them were much higher. With the SMP fixed at a higher level, the losses are also expected to be higher during the 2002-03 season at an all-India level. Since the present and near future situation of high domestic stocks and depressed international prices precludes any possibility of significant increase in the sugar prices, profitability of sugar production is unlikely to improve even on reckoning of current SMP based cane price. Under the circumstances, there is little or no scope for an increase in the SMP of sugarcane for the 2003-04 season; and none at all for an additional cane price over and above the SMP at an all-India level. (Tables 11 & 19)
- 28. Nevertheless, farmers expect an incremental rise in the SMP since costs do increase annually. Farmers also aspire to have a cane price in excess of the cost of production. In a situation of poor realisation from sugar sales, the only way such aspirations can be satisfied is through generation of sizable revenues from better utilization of by-products. This is of great importance for both mills and cane growers since conversion of by-products, particularly, molasses into ethanol as an additive to automobile fuel and bagasse into electricity could substantially improve the bottom lines of many a sugar factory. The Commission is aware of the policy measures already put in place by the Government for facilitating value-addition to by-products of sugar, particularly, of molasses. However, the Commission has been given to understand that there are a number of loose ends which are yet to be tied up. These essentially relate to issues of pricing of molasses/ethanol/power and formulation of a legal or informal (institutionalised) framework for sharing of revenues by the sugar mills with the cane growers. The Commission believes that an early resolution of these issues are critical for enabling the sugar industry to earn an extra revenue and to pay a cane price in excess of the cost of production.
- 29. After the submission of the Commission's last report on price policy for sugarcane for 2002-03 season, fresh estimates of cost of cultivation/production of sugarcane have become available from the Directorate of Economics and Statistics (DES). These estimates, generated under the Comprehensive Scheme(CS), pertain to the year 2000-01 for the major growing states of Uttar Pradesh, Tamil Nadu, Maharashtra, Andhra Pradesh and Haryana. For Karnataka, the latest estimates relate to 1999-2000. The details of these cost estimates and also those pertaining to the preceding year are presented in the table below:

Cost Estimates for Sugarcane

									(Rupees)
States	Years	A2+FL/ hec	C2/hec	A2+FL/ qtl	C2/qtl	C3/qtl	Yield/hec. (qtl)	Implicit Price/ qtl	Range of SMP*/ qtl

Andhra Pradesh	2000-01	32321	51168	44.21	69.97	77.45	727.30	80.03	62.30-83.30
	1999-00	32142	47432	43.61	64.39	71.43	728.37	71.98	56.10-75.90
Haryana	2000-01	19304	43675	32.12	72.60	79.86	589.35	100.75	59.50-68.60
	1999-00	21983	47040	35.18	75.24	83.37	606.65	104.77	56.10-61.38
Karna- taka	1999-00	28000	43527	34.40	53.48	60.49	807.23	83.92	56.10-81.84
	1998-99	19395	35144	22.88	41.45	46.86	842.66	73.34	52.70-75.02
Mahara- shtra	2000-01	35559	48304	41.92	56.98	63.49	775.36	55.12	59.50-96.60
	1999-00	34311	46835	37.16	50.70	56.36	860.25	60.14	56.10-85.14
Tamil- Nadu	2000.01	42133.	63442	35.94	54.16	60.16	1150.26	76.58	59.50-76.30
	1999-00	42419	66262	35.09	54.78	60.65	1185.73	75.34	56.10-69.96
Pradesh	2000-01	17117	28444	35.72	59.35	65.28	451.08	84.38	59.50-74.20
			27484		57.58				56.10-68.64

^{*:} Linked to state-specific recovery of Sugar.

- 30. It is observed that between 1999-00 and 2000-01, the estimates of costs of cultivation of sugarcane have increased in Uttar Pradesh, Maharashtra and Andhra Pradesh while the same have declined in Tamil Nadu and Haryana. The average yield per hectare has tended to decline in all the states except Uttar Pradesh. In Karnataka also, between 1998-99 and 1999-2000, the estimated cost of cultivation per hectare has increased in association with a decline in yield. It is also observed that the recovery-linked Statutory Minimum Prices (SMP) range fixed for sugarcane for various states have covered the respective C₂ costs of production pertaining to the corresponding years with the exception of only one state, namely, Haryana mainly because of low yield per hectare in that state. Further details of the estimates of cost of cultivation/production of sugarcane for the latest period as also for the preceding year are given in Tables 21 and 22.
- 31. Sugarcane is basically a labour intensive crop. Labour cost accounts for 50 per cent or even more of the total variable input costs. The statutory minimum wage rates have been revised or likely to be soon revised upward in some of the sugarcane growing states such as Tamil Nadu, Gujarat, Haryana, Punjab, Andhra Pradesh and Karnataka. As per information available from Labour Bureau, between August, 2001 and January, 2002 the actual wage rates for agricultural labour have increased marginally by 1.6 per cent or even less in Andhra Pradesh, Gujarat, Karnataka, Haryana, Punjab and Uttar Pradesh, but the same has increased by over 9 per cent in Tamil Nadu.(Table 23)
- 32. The electricity tariffs for irrigation purposes have reportedly been increased in Maharashtra and Karnataka with effect from January 2002 and July 2002 respectively and in Andhra Pradesh from April 10, 2002. In Maharashtra, the canal irrigation rates have also been revised upward with effect from July, 2002. The prices of other farm inputs as measured by WPI are observed to have increased by 3.11 per cent for non-electrical machinery, 4.27 per cent for lubricants and 23.46 per cent for fodder between August 2001 and August 2002. (Table 24)
- 33. In the Union Budget presented on February 28, 2002, the government announced an increase of 5 per cent in the prices of urea, DAP and MOP from their prevailing levels of Rs 4600, Rs 8900 and Rs 4255 per tonne respectively. As per this Budget announcement, the Administered Prices Mechanism (APM) in the petroleum sector has been dismantled with effect from April 1, 2002. As a

consequence, the prices of petroleum products (including diesel oil) will increasingly be market determined.

34. Based on the latest methodology adopted by the Commission in the past few years, the estimates of cost of production of sugarcane of various states have been projected for the ensuing crop season. On the basis of the actual input price movements observed so far and assuming an expected inflation rate of 4 to 5 per cent a variable input price index has been constructed for each state covered by the Comprehensive Scheme. According to this index, the variable input cost between 2000-01 and 2003-04 is estimated to be higher by 8.4, 13.4, 10.7, 10.6 and 10.8 per cent in Uttar Pradesh, Maharashtra, Haryana, Andhra Pradesh and Tamil Nadu respectively. In the case of Karnataka, the variable cost is estimated to be higher by 14.2 per cent in 2003-04 over 1999-2000. As per present practice, each of the cost estimates pertaining to the latest three years is projected and then the averages of the projected costs are considered. Accordingly, the C₂ cost of production of sugarcane for 2003-04 is projected to an average of Rs 61, Rs 64, Rs 71, Rs 48, Rs 74 and Rs 59 per quintal respectively for Uttar Pradesh, Maharashtra, Haryana, Karnataka, Andhra Pradesh and Tamil Nadu. The weighted average cost of production on this basis works out to about Rs 61 per quintal for 2003-04. The C₃ costs of production which include cost on account of managerial input, work out to Rs 67, Rs 71, Rs 78, Rs 52, Rs 82 and Rs 65 per quintal respectively for these states. The weighted average C₃ cost comes to Rs 67 per quintal.

(Tables 25 & 26)

- 35. The above projections are based on the average yields of sample holdings for T.E. 2000-01 for the concerned states. When adjusted to 8.5 per cent recovery rate using state specific average recovery rates for the years 1999-00 & 2000-01, the C_2 costs of production for 2003-04 work out to Rs 55, Rs 47, Rs 63, Rs 38, Rs 62 and Rs 53 per quintal respectively for these states. The weighted average C_2 and C_3 costs of production adjusted to 8.5 per cent recovery are projected at Rs 51 and Rs 56 per quintal respectively.
- 36. As mentioned in the earlier reports of the Commission, some state governments also provide cost of production/cultivation data based on their own surveys. Since there are many conceptual and methodological differences between the CS and those followed by the states, these data supplied by the states are not directly used by the Commission for its projection purposes. Nonetheless, the cost estimates provided by the states are found useful in more ways than one.
- **37**. The cost estimates for sugarcane this year have been received from the states of Andhra Pradesh, Gujarat, Haryana, Maharashtra, Punjab, Karnataka, Tamil Nadu and Uttar Pradesh. The estimate made by Maharashra at Rs 61.40 per quintal is higher than CS estimates of Rs 56.98 per quintal for 2000-01. The difference is attributable to much higher cost of seeds presumably because the state has estimated the cost based entirely on the planted crop whereas about 30 per cent of the sugarcane area was reported to be under ratoon crop for which no seeds are required. This apart, the state estimate also includes certain other costs such as supervision charges, incidental charges etc. which are not considered a part of C2 cost of production. After making necessary adjustments for all these additional items, the cost of production works out to Rs 56.25 per quintal which matches well with the CS estimate for the same year. For the same reasons as given above, the cost of production projected by Maharashtra for 2003-04 at Rs 66.94 per quintal is higher than the Commission's projection of Rs 64.26 per quintal for the same year. Once corrections are made to the State's estimates in accordance with the concepts and methodologies followed by the CS, the same gets reduced to Rs 62.3 per quintal i.e. lower than the Commission's estimate. (Table 27)
- 38. The management charges and transportation costs are also included in the estimates presented by other states. In addition, it is generally observed that cost on account of seeds is over estimated by most of the states. After making necessary adjustments, the state estimates get scaled down substantially and become very close or even lower than the projections made by the Commission.

- 39. Thus, the commission is quite confident about the robustness of its projections of costs for the 2003-04 season. These, however, do not include the costs of transportation of sugarcane from the fields to the mill gate. To arrive at a reasonable SMP, cost of transportation must be added to the cost of production. For this purpose, the Commission usually examines a wide range of data on cost of transportation of sugarcane, by various modes of transport and for varying distances involved, in different states. This year too, the Commission has received data on transport cost of sugarcane from various states. It is observed from this data set that transportation cost in the cane growing states currently varies in the range of Rs 5.50 per quintal in Andhra Pradesh to Rs 15 per quintal in Punjab for a radial distance of 16-25 km. The average transportation cost works out to about Rs 9 per quintal for the current year. Assuming an annual increase of 5 per cent, the likely average transport cost works out to Rs 9.50 per quintal for the 2003-04 season. Inclusive of transport cost of Rs 9.50 or say, Rs 10 per quintal, the weighted average C₂ cost, projected earlier at Rs 51 per quintal linked to recovery rate of 8.5 per cent, goes up to Rs 61 per quintal. As against this, the SMP recommended and fixed for the 2002-03 season was Rs 64.50 per quintal. Thus, the projected C2 cost for the 2003-04 season is covered by the SMP fixed for 2002-03 season.
- 40. Apart from transportation cost, a section of the industry, particularly the cooperative sector, wants the Commission to indicate the element of harvesting charges included in the SMP. Unfortunately, data on harvesting charges, which form part of the cost of production, are not generated by the DES. However, the Commission has obtained data on harvesting charges from different cane growing states. According to this data set, harvesting charges currently fall in the range of a minimum of Rs 8 per quintal in Andhra Pradesh to a maximum of Rs 15 per quintal in Karnataka/ Tamil Nadu. The average harvesting charges comes to about Rs 10 per quintal. It must, however, be clarified that the SMP of sugarcane is an all-India entity, which takes into account not only the cost of production, inclusive of harvesting charges, and transport cost, but also some margin for farmers, and is fixed in such a way as to vary with the recovery of sugar. It is, therefore, not possible to specify the exact amount of any particular cost item included in the recovery specific SMP that would be applicable to any particular state/region/sector.
- 41. Keeping in view the current realisation from sugar sales, the emerging demand and supply situation, level of stocks, cost of production, trend in prices of inputs, cost of transportation, the international price situation and the need for maintaining stability in the production of sugarcane, the Commission recommends that the statutory minimum price (SMP) of sugarcane payable by sugar factories for the 2003-04 season be fixed at Rs. 65.50 per quintal, linked to a basic recovery of 8.5 per cent subject to a premium of Rs. 0.77 for every 0.1 percentage point increase in the recovery above that level. At the average all-India recovery rate of 10.2 per cent for the last 5 years, the SMP recommended is Rs. 78.60.

```
Sd/-
(T. HAQUE)
Sd/-
(RAMADHAR)* (M. RAGHUPATHY)
Sd/-
(S.K. ROY)
October 4, 2002
```

^{*:} On leave.