P.T.C. [illegible]0 (N)
600

GOVERNMENT OF INDIA

TARIFF COMMISSION

REPORT
ON
The Revision of Price-Linking Formula
FOR
Sharing Sugar Price Between Sugar Factories And Cane Growers

BOMBAY, 1961

PRINTED IN INDIA BY THE MANAGER GOVERNMENT OF INDIA PRESS NASIK ROAD AND PUBLISHED BY THE MANAGER OF PUBLICATIONS DELHI

C

India Tariff (——Commission)

Report on the Revision of the Price-Linking formula for sharing sugar price between Sugar factories and Cane growers—1961.

सत्यमेव जयते

PERSONNEL OF THE COMMISSION

SHRI K. R. P. AIYANGAR . . . . *Chairman*

DR. S. K. MURANJAN, D.Sc. (LONDON) . . . . . *Member*

SHRI J. N. DUTTA . . . . *Member*

SHRI J. N. SEN GUPTA . . . . *Member*

PANEL FOR THE INQUIRY

SHRI K. R. P. AIYANGAR
DR. S. K. MURANJAN, D.Sc. (LONDON)
SHRI J. N. DUTTA

SECRETARY

DR. RAMA VARMA

1—3 T. C. Bom/62

GOVERNMENT OF INDIA

MINISTRY OF FOOD AND AGRICULTURE

(Department of Food)

New Delhi, the 22nd August, 1962.

RESOLUTION

No. 8-63/61-SEXP.—In their Resolution No. 63(6)-T.R./60 dated the 3rd October 1960, the Central Government requested the Tariff Commission to examine in all its aspects the statutory formula set out in the Schedule to the Sugarcane (Control) Order, 1955 for payment of additional price to the grower of sugarcane, in the light of the representations made by the manufacturers of sugar and growers of sugarcane and the control over the ex-factory price of sugar on the basis of cost structure recommended by the Tariff Commission and to suggest modifications in the existing formula, or a revised formula. The Commission submitted its Report on 8th June, 1961. The main recommendations of the Commission and the decisions the Government have now reached on them are indicated in the subsequent paragraphs.

2. The Commission's recommendations are:—

(a) The scheme of linking the price of cane with the price of sugar which is not linked with the quality of cane, which completely ignores the interests of the consumers and does not also promote good relations between the growers and the miller, is not in the larger interests of the sugar economy and should be terminated as soon as possible.

(b) In view of the historical background in which the price-linking formula was evolved and the undertakings given which have nourished the growers' expectation of an additional payment over the minimum price, the scheme of price-linking will have to be continued for the seasons 1958-59 to 1961-62. For subsequent seasons, this arrangement should be terminated.

(c) The payment of deferred cane price should apply to areas where the price of sugar was under statutory control.

(d) A new formula should be applied on an all-India basis for the seasons 1958-59 to 1961-62 for computing the deferred price payable to the growers. In this formula, the share of the cultivator has been fixed at 45 per cent of the additional sugar price and that of the miller at 30 per cent, the balance 25 per cent being represented by taxes on the share of the miller.

(e) The incentives given by the Government for increasing production of sugar, should be shared in the same ratio as suggested for sharing the additional realizations over and above the fair ex-factory price of sugar, but the amount calculated as growers' share out of the incentives should be treated separately from the amount calculated as growers' share out of additional realizations. That is to say, the deficit under one should not be allowed to be set off against the growers' share under the other.

(f) An *ad hoc* provision of 40 nP. for 10 per cent recovery and a duration of 150 days as rehabilitation allowance should be provided when applying the formula in the Northern Region and 20 nP. for Madhya Pradesh and Rajasthan. For other regions, having regard to the state of the industry there, no provision for rehabilitation allowance is necessary.

(g) As an interim arrangement, *i.e.*, after the termination of the present arrangement and pending introduction of payment by quality, arrangement should be made to offer a collective incentive as in Maharashtra, to all cane growers attached to a factory in the form of a premium element in the price of cane depending on the extent to which the average, recovery of the preceding season is an improvement on the previous average.

(h) New factories should be exempted from payment of deferred cane price and the share in the incentives for a period of three years from the date of their establishment.

(i) The price-linking formula for sharing of advantage of incentives need not be applied to the States of Maharashtra and Gujarat.

(j) There is no objection to co-operative factories being exempted from the operation of the formula so far as the member-growers are concerned. The formula should, however, apply to quantities of cane purchased from non-members.

(k) If a sugar mill desires that on grounds of financial stringency it should be exempted wholly or partially from payment of deferred price, it should apply to Government for such exemption with all relevant documents regarding its production, sales, financial account etc., of the particular year.

(l) Steps should be taken by both the Central and State Governments to introduce payment according to quality of sugarcane delivered to the factory on an all-India basis as early as possible.

3. The Government of India have accepted the recommendations at items (a), (b), (c), (g), (h), (i), (j), (k) and (l) of paragraph 2 above. Government have also decided to implement the Commission's recommendations regarding the linking of sugarcane price with the recovery of the preceding year with effect from the year 1962-63.

4. The new formula, mentioned at item (d) of paragraph 2 above, suggested by the Commission for computing the additional price payable to the growers for the season 1958-59 to 1961-62, has been examined from all angles and aspects and its implications and effect have been carefully considered. After reviewing the matter, Government

consider that it would be more appropriate, equitable and reasonable to apply the existing formula set out in the Sugarcane (Control) Order, 1955 after suitable adaptations and amendments in order to incorporate the suggestions of the Commission for the inclusion of allowances for rehabilitation and export losses, for adjustment of costs and for the sharing of incentives, than to accept the new formula for retrospective application. Government have, therefore, decided to retain the existing formula after making suitable changes, for determining the additional price that might be found due to the growers for the years 1958-59 to 1961-62. The changes would involve the incorporation in the existing formula of a more precise determination of the share of the cultivator in the net price, the inclusion of a suitable rehabilitation allowance and amount of export loss in the deductions from the gross realization and a modification in the portion of incentives to be included in the realizations to be shared. Steps are being taken to work out suitable legislation to amend the existing formula and to make it applicable retrospectively.

5. As regards item (e) of paragraph 2 above, the Government of India, having regard to the background of the scheme of incentives and to give effect generally to the recommendation of the Commission, have decided that out of the incentives allowed by Government for increasing production of sugar by way of 50 per cent rebate in basic excise duty, 25 per cent should be left with the industry to meet taxes and other outgoings and only 75 per cent of the amount so earned should be taken into account for determining the additional cane price payable to the growers, and rebates of cane cess or cane purchase tax and other rebates should be taken into account in full for the purpose of such determination.

6. The recommendation at item (f) of paragraph 2 for the grant of a rehabilitation allowance of 40 nP. per maund of sugar to the factories in the Northern Region and of 20 nP. in Madhya Pradesh and Rajasthan, needs modification. If accepted, it would lead to discrimination and also the allowance for rehabilitation would have no relation to actual allocations made for the purpose. Government have, therefore, decided that suitable allowance should be authorized only in the case of those factories which have, *in fact*, set apart funds or utilized some amount on rehabilitation during the years 1958-59 to 1961-62.

7. The Commission has also recommended that the cost schedules prepared by the Commission in 1959 for determining the cost structure of sugar and fair price payable to the sugar industry, should be brought up-to-date by adjusting changes not covered by the allowance for contingencies in the original schedules and that allowance should be made for export loss also. Government have accepted these recommendations

ORDER

Ordered that a copy of this Resolution be communicated to all concerned and that it be published in the *Gazette of India*.

V. SHANKAR,
Secretary to the Government of India

CONTENTS

REPORT ON THE REVISION OF PRICE-LINKING FORMULA FOR SHARING SUGAR PRICE BETWEEN SUGAR FACTORIES AND CANE GROWERS

Introductory

1.1. The Government of India in the Ministry of Commerce and Industry by their Resolution No. 63(6)-T.R./60 dated 3rd October, 1960 referred to us (*vide* Appendix I) under Section 12(d) of the Tariff Commission Act, 1951 the case for revision of the price-linking formula of 1958 for sharing sugar price between factories and cane-growers. The origin of the formula and its subsequent history are given in paragraph 5.

1.2. The cost structure of sugar and fair price payable to the sugar industry were referred to us for examination in September, 1958 when this formula was being notified. In our report of 1959, we recommended four regional schedules for determining the price of sugar. In determining the fair price we allowed a return of 12 per cent on the capital employed by the industry, with a view to provide sufficient funds for each unit to meet its commitments under bonus, gratuity, interest on borrowed capital and debentures, dividend on preference shares, managing agents' commission and income-tax and to leave a residue to a majority of units in different regions to declare reasonable dividends. We did not accept the claim of the industry to add to the fair price a separate element for rehabilitation. Our recommendations were accepted by the Government of India who decided to make use of the cost schedules prepared by us to fix the control prices of sugar where necessary. This decision has necessitated suitable adjustments in the price-linking formula which is based on the cost structure of the industry prepared by the Naidu Committee as later amended by the Gopalakrishnan Committee.

1.3. The sugar industry represented to Government that an additional element for rehabilitation should be allowed, as in the past, before the sugar price is made shareable with growers according to the price-linking formula. It further contended that in the regions where control on ex-factory prices of sugar operates there should be no question of sharing the sugar price with the growers as the industry cannot earn any extra price and higher profits. The industry has, however, agreed to share with the growers the gains out of special incentives given by Government to stimulate production and has urged that some simple formula for that purpose should be evolved. On behalf of the growers it was contended that the existing formula is not only complicated but also unfavourable to them.

1.4. In view of the above, the Government of India considered that a fresh examination of the matter was necessary and have referred it to us for investigation and report. The following are the terms of reference:—

(1) To examine the matter in all its aspects and suggest modifications in the existing formula with a view to improving it or to suggest a revised all-India formula or regional formulae in the light of the cost schedules given by the Commission in its report on cost structure of sugar and fair price payable to the industry, keeping in view the need for making the formula simple, easy of application and intelligible to the cane growers.

(2) To examine whether the claim of the industry for a rehabilitation allowance in the matter of division of sugar price between the cane growers and the industry is justified and, if so, the rate at which the allowance should be allowed in the price-linking formula(e).

(3) To examine whether the formula(e) should be made applicable to regions where ex-factory prices have been fixed and in case the formula is not applied, how the advantage of special incentives given to factories in years of control should be shared between the industry and the growers.

(4) To examine the effect of the price-linking formula(e) on the establishment of new factories with heavy capital outlay and whether any concession should be allowed to them in the matter of application of the formula(e).

Scope of the inquiry

2.1. From the terms of reference cited above, it will be noted that the 1958 formula was accepted by Government for adoption from 1958-59 season on an all-India basis, but its implementation became difficult. As indicated in paragraph 1.2, subsequent to the announcement of the statutory formula, Government accepted the regional schedules recommended by us in our 1959 report for the purpose of fixing the control price of sugar where necessary. Government recognise that the adoption of these schedules now involves suitable adjustments in the price-linking formula. The operative part of the resolution requires us to examine the matter in all its aspects and suggest modifications in the formula or a revised all-India formula or regional formulae. Ancillary to our examination and framing of formula(e), we are also to indicate whether and at what rate an element for rehabilitation is to be included in the price-linking formula, whether the formula(e) is to operate under conditions of price fixation and in case it is not to operate, in what manner the special incentives are to be shared and finally how new factories are to be treated in the application of the sharing formula(e).

2.2. We are not required by the present reference to examine the cost structure of the industry *de novo*. Nor are we called upon to determine a fair price for sugar cane on the basis of actual cost of production. The scope of our present investigation is limited to an examination of the pros and cons of the case of cane growers and millers for the sharing of extra price realisation in accordance with the statutory formula or any other reasonable basis. The industry has claimed various extra incidents of cost outside the schedules prepared by us in 1959, besides loss on exports. Since we are not re-examining the cost structure of the industry afresh, we have considered only such incidents of cost as are directly germane to the application of the price-linking formula.

Method of inquiry

3.1. A circular letter forwarding copies of the Resolution of the Government of India No. 63(6)-T.R./60 dated 3rd October, 1960, the price-linking formula as notified by Government in 1958, and of the four regional cost schedules given in our report (1959) on the cost structure of sugar and fair price payable to the Sugar Industry was sent to the Director, National Sugar Institute, Kanpur, the Indian Central Sugarcane Committee, Delhi, the Indian Institute of Sugarcane Research, Lucknow, the Sugarcane Breeding Institute, Coimbatore, the Indian Sugar Mills Association, Calcutta, the All India Cane growers' Federation, New Delhi and other cane growers' associations in different States inviting their views on the issues covered by our terms of reference. The letter was also circulated to all State Governments.

3.2. We received a number of replies to our letter and after considering them we circulated a questionnaire on 16th January 1961 to all the parties referred to in the foregoing paragraph, the Development Council for Sugar Industry, New Delhi, the Sugar Technologists' Association of India, Kanpur and all sugar mills in the country. The sugar mills were also requested to furnish data pertaining to their performance and working results. A press note was issued on 19th January, 1961 inviting all who were interested in the inquiry to obtain copies of the questionnaire from the Commissioner's office and to send their replies. The Ministry of Food and Agriculture (Department of Food) and the Directorate of Sugar and Vanaspati, New Delhi were requested to furnish information on certain specific points relevant to the inquiry. Our Embassies in U.S.A., Philippines, Indonesia, Argentina, Brazil and Mauritius and our High Commission in Australia were requested to send current literature pertaining to the fixation of cane prices in those countries. A list of those to whom the questionnaire and letters were issued and from whom replies were received is given in Appendix II.

3.3. Contrary to our usual practice of holding the public inquiry in Bombay, we decided this time to take evidence in different centres to afford facilities to cane growers in particular to present their case to us personally. A Press Note was issued on 2nd March 1961 announcing that we would hold public inquiries in connection with the revision of the existing price-linking formula at Patna on 17th March, Lucknow on 21st March and New Delhi on 22nd March, 1961. We visited Kanpur and held discussions with the Director of the National Sugar Institute regarding the scheme of payment of cane on quality basis. Our inquiries at Patna and Lucknow were largely attended by representatives of leading organisations of cane growers, sugar mills and State Government officials. No representative of cane growers from the Punjab or Rajasthan attended our inquiry at New Delhi and their interests were represented by the officials of State Governments who attended. We also held a public inquiry at Poona on 29th March, 1961 which was largely attended by growers and the representatives of Co-operative Sugar Factories in Maharashtra. A representative of cane growers of Andhra was also present at that meeting. Our public inquiry at Madras held on 14th April, 1961 was attended by the representatives of State Governments of Andhra, Madras, Mysore and Kerala, South Indian Sugar Mills Association, Indian Sugar Mills Association and Cane-growers' Associations of Madras, Mysore and Kerala. Our last public inquiry was held at Bombay on 21st and 22nd April, which was attended by representatives of the All India Cane growers' Federation, important cane growers' associations of various States, Indian Sugar Mills Association and its branch organisations and State Governments. We also visited a few sugar factories and met representatives of the Sugar Technologists' Association at Kanpur. A list of the places and factories visited by us in the course of the inquiry and lists of persons who attended our public inquiries in various places are given in Appendix III.

Price-sharing in other countries

4. In several foreign countries, whether or not the relationship between cane grower and sugar miller is controlled by statute, it is usual to have a linking between prices of sugarcane and those of raw sugar or refined sugar which, as a rule, are free market prices. Most commonly the price of cane is determined with reference to its quality, that is, the sugar recovery factor. As India has also sought to adopt in her price-linking formula some of the features in vogue in other countries we have given in Appendix IV a summary of the practice in certain important sugar producing countries. But some of the features of our sugar economy have no parallel abroad *e.g.*, enforcement of price control, the existence of an uncontrolled gur industry which competes with the white sugar industry for supplies of cane, dependence of the mill industry for its cane on a very large number of small cultivators, low sucrose content in cane and less recovery of sugar in areas where mills are concentrated, the absence of any regulation of acreage under cane, etc.

5.1 *Cane price.*

History of the case

5.1.1. The sugar industry is an agro-industry based on sugarcane which is a perishable raw material. The Indian Tariff Board while recommending the grant of protection to the sugar industry in 1931 recognised the importance of the agricultural aspect of sugarcane. In July, 1933 a sugar conference was convened at Simla by the Government of India to discuss chiefly the question of payment by sugar mills of fair prices to sugarcane growers. At this conference the spokesmen of cultivators observed that sugar mills had been making large profits without sharing them equitably with the cane growers as had been intended under the Sugar Industry (Protection) Act, 1932.

They demanded that Government should fix a minimum price for sugarcane which should be paid by sugar mills to the cane growers. The representatives of sugar mills, on the other hand, contended that it was both unnecessary and undesirable for Government to interfere with the forces of demand and supply which, in their opinion, could be trusted to establish an equilibrium price for sugarcane. Government, however, thought it necessary that some steps should be taken to ensure a fair price for cane to the growers. Accordingly in 1934, the Government of India, by the Sugarcane Act of 1934, authorised the Provincial Governments to declare any area to be a "controlled area" within which they could fix a minimum cane price. Thereupon the Governments of U.P. and Bihar proceeded to fix a minimum price for cane required for crushing by the factories. In doing so, they considered it desirable that the minimum price should be fixed in such a manner that it bore a definite relation to the price of sugar as realised from time to time by the industry and that the price of cane should be fixed on the basis of quality as indicated by the percentage of sugar recovery from cane. The measures adopted from time to time to achieve this objective were as follows:—

(a) From 1934-35 the Governments of U.P. and Bihar fixed cane prices as linked to sugar prices in accordance with a sliding scale and the cane price was reviewed every fortnight on the basis of prevailing sugar prices.

(b) During 1937-39 a single minimum price was fixed from time to time and the sliding scale system was discontinued.

(c) In 1939-40 the sliding system was re-introduced with the modification that a floor price for cane was also fixed.

(d) In 1940-41 a further modification was made. A floor price for cane was fixed with provision for a deferred payment to the cultivator in case the factory was able to sell sugar at a higher price. Until April, 1942 the price of cane was fixed on this basis.

Following, however, the imposition of control by the Government of India on the price and distribution of sugar in 1942, minimum prices for sugarcane were fixed by the Government of India from year to year in consultation with State Governments. The ex-factory price of sugar was determined on the basis of the minimum prices of cane fixed from time to time. This system continued till 1947. After the decontrol of sugar in December 1947, the U.P. and Bihar Governments resumed their power to fix minimum prices for cane and after considering the recommendations of the Joint Sugar Commission they fixed prices for the seasons of 1947-48, 1948-49 and 1949-50.

5.1.2. The Tariff Board in its report (1950) on the continuance of protection to sugar industry observed that the then prevailing procedure for fixing minimum prices for cane was not satisfactory and recommended that it should be replaced by a more rational procedure which should be based, as far as possible, upon authentic economic data. The Board further stated that the minimum price for sugarcane should be fairly attractive to the cane grower without unduly raising the price of sugar or encroaching upon the minimum margin of profit to the manufacturer. The Board suggested that in fixing a minimum price for cane, factors like cost of production, fair return to the growers etc. should be taken into consideration. These suggestions have been, in the main, incorporated in the Sugarcane (Control) Order, 1955 which requires the Central Government to fix cane prices 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 commodities,

(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.

5.1.3. In 1950-51 the authority to prescribe the minimum prices for cane was assumed by the Central Government so as to ensure, if necessary, a uniform price all over the country. At that time the price of sugar was controlled and Government correlated it with the minimum price prescribed for cane. Towards the end of 1952 sugar was decontrolled (except for reservation of 25 per cent production). Though the price of sugar rose steeply, the minimum cane price was reduced from Rs. 1.75 per md. to Rs. 1.31 per md. For the seasons 1953-54 to 1958-59 the minimum price fixed was Rs. 1.44 per md. for delivery at factory gates and Rs. 1.31 per md. for delivery at centres connected by rail. However, there were representations and agitation on behalf of cane growers for raising the cane price. The State Governments of U.P. and Bihar in particular recommended an increase in the price of cane. It was felt that if an incentive was given to growers by an increase in the price of cane, it would result in more supplies of cane to sugar factories and consequently larger production of sugar. Accordingly the Government of India decided to raise with effect from 25th October, 1959 (that is for 1959-60 season) the price of sugarcane from Rs. 1.44 to Rs. 1.62 per md. for gate delivery and from Rs. 1.31 to Rs. 1.50 for delivery at centres connected by rail. These prices were applicable to all factories in the country except those in the States of Maharashtra and Gujarat, where a consolidated higher price—in lieu of the minimum price and the deferred amount that may be due under the price-linking formula—is fixed every year on the recommendations of those State Governments. As against the minimum price of Rs. 1·44 per maund (Rs. 39.30 per ton of cane), the factories in the area had paid for the seasons 1954-55 to 1957-58, Rs. 43, Rs. 44, Rs. 45 and Rs. 46 per ton of cane respectively. During 1959-60 the consolidated prices fixed on recovery basis were as under in the two States:—

Percentage of recovery	Price of sugarcane per ton
Less than 11 per cent	Rs. 52.00
11 per cent and above but below 11.5 per cent . . .	,, 53.00
11·5 per cent and above but below 12 per cent . . .	,, 54.00
12 per cent and above but below 12.5 per cent . . .	,, 55.00
12·5 per cent and above	,, 56.00

For the season 1960-61 prices have been maintained at the existing level and the same prices are notified for the 1961-62 season also.

5.1.4. Some of the recent developments in sugar prices may be noted here. With effect from 30th July, 1958 control over prices of sugar was imposed on sugar produced by the factories in U.P., North Bihar and Punjab. The prices fixed per maund of I.S.S. Grade D-29 sugar were Rs. 36·00 for U.P. and North Bihar and Rs. 36·50 for Punjab factories. Government did not fix prices for factories in other regions which were generally deficit in sugar, since prices there were determined on the basis of the landed cost of sugar from the surplus areas of U.P. and North Bihar. During the season 1958-59 the above ex-factory prices were continued. For the season 1959-60 the prices of sugar produced during the season and the stocks held at the commencement of the season by the U.P. and North Bihar factories were fixed at Rs. 37·85 per maund and Punjab factories at Rs. 38·35. In April, 1960 control over the price of sugar produced by South Bihar factories was imposed and the ex-factory price was fixed at Rs. 38·35 per maund. During the season 1960-61 the ex-factory prices for 1959-60 season have been continued.

5.2. *Price-linking formulae.*

5.2.1. *SISMA FORMULA*.—We have stated in the foregoing paragraph that after the removal of control over the price of sugar during 1952-53 (towards the end of 1952) prices of sugar rose steeply. Factories generally regarded the minimum price fixed by Government to be the price payable for sugarcane without regard to price realised by them for sugar. The then Union Minister for Food and Agriculture suggested to the Government of Madras and the South Indian Sugar factories that the latter should share with the growers the higher price of sugar which they realised on account of freight advantage enjoyed by them over the North Indian factories. Accordingly in 1953 the South Indian Sugar Mills Association devised a formula (known as the SISMA formula) in consultation with the cane growers of Madras State for passing on to the growers a portion of the benefit of higher sugar prices realised by the factories in that State. The factories in the Madras State paid to the grower an extra price over the minimum price for 1952-53 season in accordance with that formula, the salient features of which are stated below:—

SISMA FORMULA

Sugar price per ton		Average cane price per ton of cane
At and above Rs. 940	70%	of the nett amount realised by a factory from the sale of one ton of sugar divided by the actual number of tons of cane used by it to produce one ton of sugar.
At Rs. 840	67%	Ditto.
At Rs. 740	64%	Ditto.
At Rs. 640	61%	Ditto.
At Rs. 540	58%	Ditto.
At Rs. 440	55%	Ditto.
Upto Rs. 440	52.58%	Ditto.

The nett amount realised by a factory means the average price realised from the sale of one ton of sugar after deduction of excise duty, direct taxes on the industry, sugar or sugarcane and selling agency commission, where actually paid, up to a minimum of 1 per cent. According to the formula the share of the growers increased by 0.03 per centum for each Re. 1 increase in the selling price of sugar.

5.2.2. *Formula of* 1953-54.—During the 1953-54 season the Government of India fixed a price of Rs. 1.44 per md. for cane delivered at the gate of the factory and Rs. 1.31 per md. for delivery at out-station centres. While the fair average ex-factory price of sugar based on the minimum price of sugarcane fixed by Government worked out to about Rs. 27 per maund, the market price of sugar averaged Rs. 30.25 *n*P. in U.P. and Bihar and Rs. 32.50 in the Southern markets in January, 1954. The sugarcane growers in the U.P. and Bihar, therefore, started in early 1954 an agitation for a higher price of sugarcane. Instead of allowing a straight increase in the minimum price of sugarcane, the Government of India announced that they were considering the question of introducing a scheme by which a legitimate share of the additional profit made by sugar factories could be passed on to the cane growers. Pursuant to this a tripartite conference between the representatives of Government, sugarcane growers and sugar industry from the States of U.P. and Bihar was held in June, 1954. At the conference the principle of linking cane price with sugar price was recognised and it was decided that Government should pass necessary legislation to give effect to the principle. The proposed legislation should enable the factories to pay in advance a minimum price fixed by Government and later, an additional amount, if due, to bring the total payment in proportion to the sugar price. The SISMA formula which had been working satisfactorily in the South was examined in this connection for all-India application with certain modifications suggested by the South Indian Sugar Mills Association. As an agreement could not be reached on it, the Ministry of Food and Agriculture devised a new formula. The basic principle of the new formula was that the growers supplying cane to a sugar factory share with the factory owner the net sugar price realised by him during a year in the same ratio as the cost of cane bears to the factory's cost of production of sugar during that year including the miller's profit but excluding taxes. The 1953-54 formula is given below: —

$$\left.\begin{array}{l}\text{Price of cane per maund}\\ \text{payable by a factory}\end{array}\right\} = \frac{X}{100} \times \frac{P-(\text{Taxes} \pm d \textit{ plus } 1\% \text{ sales commission})}{\text{Maunds of cane required to produce one maund of sugar at the factory}}$$

In this

X is the growers percentage share in the price of sugar.

P is the average price of sugar per maund realised by the factory and adjusted to I.S.S. Grade E-27.

d is the difference between the cost of manufacture of sugar of the factory and the region on account of differences in duration of season and recovery.

For the purpose of applying the formula during the 1953-54 season the country was divided into 17 regions and for each region the average duration of season and average recovery for the season were worked out. Using regional averages and the minimum cane price of Rs. 1.44 per md. the cost of producing one maund of sugar in each region during 1953-54 was worked out with the help of the Srivastava schedule. However, as this schedule was based on conditions prevailing prior to World War II, certain additional charges, such as extra costs of labour awards, interest to cover storage over longer periods, higher depreciation, extra expenditure on transportation of cane, other miscellaneous expenses including developmental activities and some profit to effect improvements in plant and machinery were allowed. The percentage share 'X' was calculated for each region by dividing the value of cane required to produce one maund of sugar in the region by the total cost and multiplying the result by 100. These percentages worked out for 17 regions were as follows: —

West U. P.	...	60	Orissa	...	60
East U. P.	...	53	Hyderabad	...	60
North Bihar	...	53	Mysore	...	60
South Bihar	...	50	PEPSU	...	53
Bombay	...	60	Madhya Bharat	...	53
Andhra Pradesh	...	57	Rajasthan	...	53
Madras	...	57	Travancore-Cochin	...	50
West Bengal	...	57	Bhopal	...	50
Punjab	...	60			

The principle underlying the new formula was generally accepted by the representatives of State Governments, the sugar industry and the cane growers at a meeting held in October 1954. The new formula after formal approval by the Government of India was communicated to State Governments and factories for adoption on a voluntary basis for the 1953-54 season. As regards factories in the South, it was decided that they might adhere to the SISMA formula if the cane growers of that area so desired.

5.2.3. *Gopalakrishnan Formula.*—The cane growers later represented that the above formula was not in their best interests and suggested its re-examination. The sugar industry also represented that allowance for depreciation and replacement in working out the cost of manufacture of sugar for purposes of the formula was inadequate and did not take into account fully the current cost of machinery and spare parts. The Government of India then appointed an Expert Committee in April, 1955 under the Chairmanship of Shri P. A. Gopalakrishnan to examine the formula adopted for 1953-54 and to suggest modifications with a view to its applicability in future years. The Committee in a report dated 22nd June, 1956 considered the principle of the 1953-54 formula as sound but suggested the following modified formula:—

$$\frac{X}{100} \times \frac{\text{P taxes—'m'—actual sales commission per maund of sugar not exceeding -/12/-per cent}}{\text{Maunds of cane required per maund of sugar}}$$

In this

X is the percentage share of the grower in the price of sugar as determined from the table (given in the Committee's Report) on the basis of recovery and duration of season of the factory for the year. The recovery shall be the figure obtained by dividing the quantity of sugar produced by the quantity of sugarcane purchased and verified from the records of the Resident Excise Inspector.

P is the ex-factory price of sugar determined by the Central Bureau of Sugar Prices and adjusted to I.S.S. Grade D-28 according to grade price differentials fixed by Government. This would also include credit for money realised by the factory from sale of by-products.

"Taxes" means excise duty, cane cess, co-operative societies' commission, special payments, if any, necessitated by labour awards or any other tax or cess levied on sugar or sugarcane by the Central or State Government calculated to per maund of sugar.

'm' is the actual cost incurred per maund of sugar in transporting outstation cane by the factory over and above -/2/- per maund of cane.

"Sales commissions" will not be admissible on sugar sold directly by factories or under Government orders.

"Maunds of cane required per maund of sugar" will be the quantity calculated by dividing the sugar produced by the weight of sugarcane purchased at the gate and at outstation centres *minus* the quantity of cane lost in driage subject to a ceiling of 1 per cent on sugarcane purchased at outstation centres.

The Committee recommended that the formula should be made applicable on a compulsory basis to all the States and factories unless, however, the factories and growers in a State preferred, by a 75 per cent majority, the adoption of any other formula. It did not consider it desirable to determine the share of the growers on a regional basis although it agreed that due consideration should be given to conditions obtaining in individual factories in regard to production or sale of sugar in particular years in the matter of linking price of sugar with the price of cane. It worked out a table showing percentage share of growers in the price of sugar calculated for different recoveries and duration of season according to the amended Cost Schedule prepared by the Naidu Committee and a minimum price of Rs. 1.44 per md. of cane. It also recommended that new factories should be exempted from payment of any extra price for cane for the first two years of their existence and that the introduction of a scheme of payment for cane on quality basis was necessary in the national interests.

5.2.4. *Statutory Formula of* 1958.—The formula recommended by the Committee was accepted by Government subject to certain modifications and the modified formula was notified by their order No. G.S.R. 884/E.S.S. Com/Sugarcane, No. 3-1/58-SV dated 23rd September, 1958 amending the Sugarcane (Control) Order, 1955. The new formula, which was subsequently amended by the Ministry of Food and Agriculture Notification No. G.S.R. 287/E.S.S. Com/Sugarcane dated 2nd March, 1960 so as to take note of the incentives given to producers, is expressed in algebraic terms as follows:—

$$\left.\begin{array}{l}\text{Amount to be paid (per maund or kilogram of}\\ \text{sugarcane) by a producer of sugar to the seller of}\\ \text{sugarcane}\end{array}\right\} = \frac{X}{100} \times \frac{P - T - C - S}{M} - Y$$

In this formula—

(1) 'X' is the percentage cost of sugarcane to the total cost of sugar excluding taxes as determined by the Central Government from time to time on the basis of recovery and duration of season of the factory for the year.

(2) 'P' means the sum of (i) the (per maund or kilogram) average ex-factory price of sugar realised by the producer adjusted to I.S.S. Grade D-29 according to the price differentials fixed by the Central Government, and (ii) the money realised by the producer from the sale of molasses and press mud in relation to each maund of sugar, and (iii) any amount realised by the producer by way of refund in excise duty or cane cess or by way of grant or subsidy given by the Central or the State Government in relation to each maund or kilogram of sugar.

(3) 'T' is the amount paid in relation to each maund or kilogram of sugar on account of excise duty, cane cess, commission paid to co-operative societies, any sum paid to workmen as bonus or as a result of any award and any other tax levy or cess imposed on sugar or sugarcane by the Central or State Government or by any other authority, and any sum spent on approved schemes of sugarcane development.

(4) 'C' is the actual cost incurred in relation to each maund or kilogram of sugar on the transport of sugarcane by a producer of sugar in excess of the rebate allowed for the purpose by Government in the minimum price of sugarcane purchased at centres other than factory gate.

(5) 'S' is the actual amount of commission paid in relation to each maund or kilogram of sugar; provided that such amount shall not exceed seventy-five Naye Paise for every sum of hundred rupees of sugar sold; provided further that commission shall not be taken into account in respect of sugar sold directly by a producer of sugar or in pursuance of any order of the Central Government.

(6) 'M' is the weight in maunds or kilograms of sugarcane required to produce a maund or kilogram of sugar and such weight shall be calculated by dividing the total weight of sugarcane purchased by the weight of sugar produced therefrom and for this purpose the weight of sugarcane purchased shall be the sum of the total weight of sugarcane crushed plus actual driage subject to a ceiling of 1 per cent on the weight of sugarcane purchased at centres other than the factory gate.

(7) 'Y' means the total sum of (i) the minimum price of sugarcane per maund or kilogram fixed by the Central Government under clause 3(i), (ii) any extra price paid by the producer for sugarcane in addition to the aforesaid minimum price, and (iii) the premium, if any, paid for any approved variety of sugarcane or under any scheme approved by the Central Government for payment of price for sugarcane on the basis of quality.

Provided that the rebate, if any, allowed in the minimum price aforesaid (excluding a rebate allowed on account of transport charges), shall be deducted from the total sum aforesaid.

This formula is on the whole based on the one recommended by the Gopalakrishnan Committee except that (a) the price of sugar is adjusted to D-29 grade sugar instead of D-28 grade as recommended by the Committee and (b) while the Gopalakrishnan Committee constructed a table for the purpose of determining percentage share of cane growers the Central Government reserved the right to prescribe the necessary procedure in this behalf. Government have also laid down that (i) new factories shall not be liable to pay any extra amount under this scheme during such period after their establishment as the Central Government may from time to time specify, (ii) where the audited accounts of a sugar factory show loss for any year, it may be exempted from payment of the amount due under the price-linking formula, and (iii) if the profit of a factory is less than what has been provided for the calculation of the growers' share, Government may exempt the factory from payment of such part of the amount payable as premium over minimum price as it thinks fit.

5.2.5. No price-linking scheme was in operation during the seasons 1954-55 to 1957-58 except in certain factories in the South which continued to make payments under the SISMA formula. Although a decision was taken by Government that the formula referred to in the foregoing paragraph would be adopted on a compulsory basis with effect from 1958-59 season on an all-India basis, unless any alternative scheme was applied in a State or region in consultation with the State Government or Governments concerned, the decision has not been implemented so far.

5.2.6. *Control of sugar prices.*—It will be seen from the above that a minimum price for sugarcane supplied to sugar factories has been in force year after year more or less since 1937-38. Control over prices and distribution of sugar has been exercised off and on. At present statutory price fixed on the basis of the cost schedules recommended in our report (1959) is in force in U.P., Bihar and Punjab. As regards other areas, excluding Andhra, Madras, Mysore and Kerala, informal control is exercised by the Sugar Directorate specifying the ex-factory prices of sugar in the relevant release orders. In the case of Andhra, Madras, Mysore and Kerala, there is a gentleman's agreement between the members of the South Indian Sugar Mills Association and the Sugar Directorate by which the former sell their sugar at prices not exceeding the landed cost of North Indian Sugar in the concerned markets. The entire distribution of sugar is controlled and all factories are obliged to sell sugar to nominees of Government only.

5.2.7. *Background of price-linking.*—The claim of sugarcane growers to additional payment over and above the minimum price was recognised for the first time in 1940-41 when the State Governments of U.P. and Bihar allowed, in addition to the basic minimum price, a deferred payment to cane growers in accordance with the average selling price of sugar during the season. This coincided with a period of shortage and high prices of sugar. Later, in 1953-54 the late Rafi Ahmed Kidwai, the then Minister for Food and Agriculture, made a statement in Delhi on 27th January, 1954 to the effect that while Government had no idea of increasing the minimum cane price, they were "trying to evolve a scheme which would entitle the cane growers to a share of the extra profit which the sugar factories might earn on account of the prevailing higher price of sugar". This announcement was also made when shortages prevailed and prices of sugar soared high. Government's promulgation of the existing formula, though made shortly after price control was reimposed on sugar in U.P. and North Bihar, also followed a period of shortage and rising prices of sugar in 1957-58 season. It appears, therefore, that the formula was presumably not intended for application in times of normal sugar prices or when there was price control. It may also be stated that at present as an alternative to the arrangement in the formula, consolidated higher prices of cane (in lieu of the minimum price fixed by the Government of India and deferred payment that may be due under the price-linking formula) are in force in Maharashtra and Gujarat. For other States, however, a minimum price of Rs. 1.62 per md. of cane for delivery at the gate and of Rs. 1.50 per md. for delivery at out-centres have been fixed by the Government of India. In view of clause 3A of the Sugarcane (Control) Order, 1958 and Government announcement to the effect that the formula referred to in paragraph 4.2.4 would be adopted on a compulsory basis with effect from the 1958-59 season, cane growers (in areas including zones where there is price control on sugar but excluding Maharashtra and Gujarat) supplying cane to factories expect to receive deferred prices in addition to the minimum price.

Our approach to the problem

6.1. By our trems of reference, we are required "to examine the matter in all its aspects" in suggesting, modifying or endorsing any sharing formula. In other words, we are not to take for granted the need for any formula for price-linking, but are expected to look into the present position of the industry and the need for its future development with particular reference to the interests of consumers as well as those of cane growers and sugar millers and the position of sugarcane *vis-a-vis* agricultural crops. Such an overall view indicates three conditions which any proposed solution of the problem under consideration must satisfy.

6.2. Firstly, no solution proposed should inhibit the erection of mills in areas other than those served by existing mills where advantages for cane production exist, or restrict expansion of the sugar output of factories. Though the existing growers who supply sugarcane to the mills require sympathetic treatment, any discouragement to setting up new sugar mills in other areas would merely perpetuate the high cost of sugar, which in turn would hamper the growth of the industry. As the statistics given below would indicate, the cane crushed by existing sugar factories amounts to 6 to 38 per cent of the cane output in various States.

Statement showing the percentage of cane crushed by sugar factories to total cane crop in each State

('000 tons)

States	Percentage of cane crushed by sugar factories to the total cane crop produced in each State during			
	1955-56	1956-57	1957-58	1958-59
Uttar Pradesh	34.65	32.06	31.06	30.05
Bihar	..	..	..	..
Bombay	31.42	34.69	39.01	36.50
Andhra Pradesh	28.26	30.39	31.20	19.36
Punjab	7.66	11.88	12.97	11.10
Madhya Pradesh	33.13	38.94	27.84	24.94
Mysore	19.54	15.03	22.19	20.85
Madras	19.54	20.82	25.16	23.16
Rajasthan	32.01	32.34	21.29	18.47
Kerala	26.28	37.96	28.93	38.00
Orissa	4.79	4.79	4.45	0.41
West Bengal	7.42	8.38	7.01	5.96

Shortage of cane need not therefore be feared as a likely obstacle to the rapid expansion of the organised industry except in so far as gur and khandsari, which compete for cane supplies, disturb the price and supply of the raw material in certain circumstances. At the same time the consumption of sugar in the country has remained low because of the high price of sugar which is due partly to the high cost of cane and partly to high taxation. The cost of cane to the total cost of sugar works out to about 75 per cent in India, while the corresponding ratio in other important sugar producing countries is much less. One obvious method to reduce sugar cost is to encourage mills in areas where better quality cane is produced at a lower cost and to disperse the industry in such wise that transport costs borne by the consumer are reduced to a minimum. The incidence of various levies on sugar is also as high as 35 per cent of the sugar price. We refrain from offering any comments on the tax policy in regard to this industry, as apart from the specific circumstances of the industry from time to time it also involves general issues of the fiscal policy of Government.

6.3. Secondly, the price of cane cannot be considered independently of the prices of other agricultural crops. It is true that unlike most other crops, sugarcane is a perishable article and cannot be stored. On that ground, to help unorganised growers it may be necessary to regulate the deliveries of cane and to compel the miller to accept regulated deliveries at such floor price as may be fixed. The principle of a floor price for agricultural products although not yet in operation on an extensive scale is finding general acceptance in this country. It still does not apply to the largest sector of agriculture, namely, food-grains and important cash crops like jute and oil seeds. The minimum or floor price for any agricultural product must be in economic relationship with those of other alternative or competing crops and as such could only be based on investigated costs of production including profit if imbalances in the agricultural economy are to be avoided. The Control Order relating to price fixation takes due cognisance of this. As a raw material of the sugar industry, cane is on par with and not different from other raw materials. Both in the interests of growers and millers, a floor price for the product used as raw material is obviously desirable as it assures the farmer of a certain return for his crop and ensures a proper supply to the industry. A deferred share in the price of a manufactured product raises, however, serious difficulties whatever the circumstances in which it operates. In a free market where prices take their own course according to the general trends of the economy, growers of a raw material can hardly claim a share in the price of the final product without sharing the risks of business. During the course of our discussions, we did not come across a shred of evidence indicating the willingness of cane growers to bear losses in any circumstances. It is indeed difficult to conceive of any practical arrangement by which reimbursement of losses can be enforced against cultivators of any crop. Under controlled prices and planned investment, the situation is even more difficult. A deferred share in the price over and above minimum or floor price could only be a share in the surplus of those units in an industry which have earned a surplus. In the case of marginal factories without surplus, there would be nothing available to share. This itself is a proof that a deferred share arrangement means in effect that for a raw material of identical quality, different factories must pay different prices. The acceptance of a principle like this is not only inequitable to the manufacturer but will, in the long run, further weaken incentive to produce quality cane, destroy all endeavour for efficiency in industry and make rational allocation of productive resources and equipment meaningless.

6.4. Thirdly, in view of vast areas under sugarcane and the prospect for extension in more suitable areas, export possibilities of sugar cannot be ignored as a factor for stabilising and expanding the industry. Our exports are now impeded first by the existence of the International Sugar Agreement operating under an export-quota system, secondly by low consumption of sugar in free markets not covered by these export quotas and thirdly by the high Indian prices. Most exporting countries have a lower price for export than the price charged to the domestic consumer and are thereby able to support the arrangement. Even if some modification could be obtained to the International Sugar Agreement, our sugar will not be able to compete in the world market, if price continues to be as high as at present. In other words, the pre-requisite to exploit the export potential is reduction in cost and price. Any scheme for the determination of fair price for sugarcane should take note of this and provide for encouragement for the production of better quality cane, which would reduce the cane cost in the total cost of sugar. It should also avoid aggravation of the problem of uneconomic cultivation of cane and ensure a cautious but certain transition to an economic price.

6.5. The history of prices of sugarcane for our present purpose may be studied in relation to 4 periods, (i) from 1934 to 1942 when the market price of sugar was free; (ii) from 1942 to 1947 when the price and distribution of sugar were controlled; (iii) from December, 1947 to 1952-53 when controls were withdrawn; and (iv) from 1952-53 to July, 1958 when decontrol continued except for 25 per cent of the output of factories. During the first period of free market price for sugar, the Governments of Uttar Pradesh and Bihar under authority of Sugar Cane Act of 1934 experimented at different times with sliding scale prices, single minimum price, sliding scale with a minimum price and finally a minimum price combined with deferred payment. This was clearly an effort to link cane growers and sugar manufacturers in favourable or unfavourable fortunes as indicated by the free market price of sugar. During the second period of war and post-war times, the over-riding objective was to keep the price of sugar under check by controlling the price of sugarcane in relation to agricultural crops generally and food crops particularly. During the third and fourth periods of decontrol, the Governments of Uttar Pradesh and Bihar first stepped in to assure and enforce minimum prices to cane growers and from 1950-51 the Government of India resumed the authority to fix prices in the interest of uniformity. Although the price of sugar was rising steeply, the minimum price of cane was at first reduced from Rs. 1.75 per md. to Rs. 1.31 per md. for delivery at the gate of the factory for the season 1952-53, then raised to Rs. 1.44 per md. for the seasons 1953-54 to 1958-59 and subsequently owing to pressure from the Government of U.P. raised to Rs. 1.62 in October, 1959. In July 1958, control on price of sugar was re-imposed for U.P., North Bihar and Punjab factories.

6.6. We give this previous history because it brings out that the circumstances in which we are invited to examine the justice or feasibility of cane growers participating in the profit margin or price of sugar manufacturers are without precedent. Excluding war and post-war times, Governments have stepped into link cane and sugar prices only under conditions of a free market for sugar. The SISMA formula, the Government of India formula of 1954 and the Gopalakrishnan Committee formula of 1955 are all based on the assumption of a free market price of sugar.

Examination of the views of the several interests concerned on price linking.

7.1. It will be seen from paragraph 5.1.1 that the idea of allowing deferred payment to the growers in addition to the basic minimum price payable at the time of delivery of cane was applied for the first time during 1940-41 season. The deferred payment system was discontinued from 1942 but was reintroduced on a voluntary basis in the South in 1952-53 and in the rest of India in 1953-54. After 1953-54 no deferred payment to cane growers has actually been made in North India but some of the factories in the South had been making payment of deferred price in accordance with the SISMA formula. The factories in Maharashtra and Gujarat paid a consolidated higher price in lieu of the minimum price and the deferred amount that would have been due under the price-linking formula.

7.2. In contrast with the support given to the price linking formula by certain State Governments, the representatives of the industry without exception have urged that neither the present system of fixing minimum price for cane regardless of quality nor the price-linking formula enforcing a further deferred price stimulates the production of better quality cane or raises the yield of such cane per acre. This view has been supported by Shri Nand Kishore Narain, President of the Bihar State Cane Growers' Co-operative Association and expert bodies like the Indian Central Sugarcane Committee, Indian Institute of Sugarcane Research and the Sugarcane Breeding Institute, Coimbatore. The industry has urged that the earlier prices of Rs. 1.44 per md. for delivery at the gate of the factory and Rs. 1.31 per md. for out-centres connected by rail were quite remunerative; that the higher prices of Rs. 1.62 per md. for delivery at the gate and Rs. 1.50 for delivery at out-centres which were sanctioned from the 1959-60 season have led to large-scale diversion of areas to cane cultivation even in places not best suited for the purpose. It referred to the statistics published by the Ministry of Food and Agriculture according to which the area under cane rose from 4.803 million acres in 1958-59 to 5.178 million acres in 1959-60. The All-India second estimate of sugarcane for 1960-61 has placed it at 5.702 million acres which means an increase in a single year of 524,000 acres. Mention was made that the increase has been significant in U.P. which is the main sugar producing State in the country, that this as also over-production of sugar have created a serious problem in U.P. The representatives of the industry urged that as they are obliged to take delivery of all cane accruing from reserved areas it has become a matter of urgency to control the rising trend in production of cane by suitable adjustment of prices. They also contended that since the white sugar industry consumes only 35 per cent of cane produced in the country and no obligation about price is enforced regarding the balance of the output, the imposition of any price-linking formula over and above the minimum price for cane is discriminatory and inequitable for sugar producers and inapplicable in a controlled economy.

7.3. All the above points were contested by the growers' representatives. They stated that two years ago when the white sugar industry was overtaken by a crisis of short supply of cane owing to competition from khandsari and gur units, the sugar industry pleaded for a rise in the then prevailing minimum prices of cane (Rs. 1.44 per md. for delivery at the gate of the factory and Rs. 1.31 per md. for delivery at out-centres connected by rail on the ground that they were unremunerative for growers and that large-scale diversion of cane at higher prices to gur and khandsari manufacturers was taking place. They also contended that the *ad hoc* committee appointed by the Indian Central Sugarcane Committee which examined the cost of cultivation of cane in the crop seasons 1955-56, 1956-57 and 1957-58 for Punjab, U.P., Bihar and Andhra Pradesh and for 1956-57, 1957-58 and 1958-59 for the States of Maharashtra and Gujarat had depressed the cost of cultivation in those States by arbitrarily cutting down all legitimate expenses to ridiculously low figures. In support of this, one growers' representative who was a member of the Committee cited that the Committee had calculated the value of a pair of bullocks at Rs. 340 and irrigation charges per acre at Re. 0.45 in North Bihar, Rs. 1.45 in Eastern U.P., Rs. 7.02 in Central U.P., Rs. 14.30 in South Bihar and Rs. 17 in Western U.P. Interest on capital has been calculated at 6¼ per cent per annum although even Village Co-operative Banks charge 9 per cent per annum. He stated that during the period covered by the inquiry a pair of bullocks was not available for less than Rs. 1,000 and tube-well irrigation rates for sugarcane in Bihar were about Rs. 60 per acre per year. He added that during 1956-57 and 1957-58 when there was no burdensome surplus of sugar the area under cane was 5.057 million and 5.080 million acres respectively which were not much lower than 5.178 million acres during 1959-60. The present crisis of over-production is not due to any large-scale diversion of land to cane or over-production of cane but due to slump in the price of gur and khandsari. Owing to fall in export of jaggery the demand of cane for conversion into gur has declined. Khansari units have been brought under licensing and Khandsari sugar has been subjected to an excise duty. This has reduced the off-take of cane by those units. Further, the rebate in excise duty on excess production of sugar which is Rs. 5.62 per cwt. and works to Rs. 4.14 per md. of sugar, yields to the factory a concession of nearly 40 nP. in the price of sugarcane per md. In addition, State Governments of U.P. and Bihar have allowed certain concessions in cane cess. These concessions are substantial and account for more than 25 per cent of the statutory price of cane and the sugar industry has been drawing supplies from distant non-reserved areas. They emphatically denied that the current prices (Rs. 1.62 per md. for gate delivery and Rs. 1.50 per md. for delivery at out-stations) were remunerative and alleged that the Central Government have not given due consideration to two essential factors, cost of cultivation and fair return to the grower in fixing the minimum price. They also argued that the reason why cane-growers had not taken to alternative crops was that there are certain areas where no other crop except a harder crop like cane could be successfully grown and that it gives ready cash. The growers' representatives further urged that it would be most unwise to bring about a reduction in acreage under cane by reducing the minimum price of cane. If reduction or regulation of cane acreages is considered desirable in the interests of the country, it could be done if both mills and cane-growers or cane-growers' co-operatives could come to an arrangement by which the quota of sugarcane area of each individual grower would be fixed on the basis of his supply of cane during the preceding five years and he undertakes to supply the stipulated quantity of cane (subject to reasonable variations as sugarcane output is affected greatly by vagaries of nature) within a stipulated period and the mills also on their part undertake to accept all such supplies. Both of them should be under an obligation—the growers to supply the stipulated quantity within the period stipulated according to an agreed schedule of delivery and the millers to take the stipulated quantity as offered—penalty being provided for non-compliance. They urged that such a measure would effect reduction in cane areas, encourage growers to plant severally early-ripening, mid-term and late-ripening varieties of cane depending on the period stipulated for supply of cane to mills and also assure an even flow of cane to mills during the crushing season. In the context of large amount of cess collected for the development of sugarcane they also pressed for better roads in cane areas particularly in Bihar and U.P., supply at reduced rates of fertilisers, insecticides, fuel oil and tube-well irrigation facilities and said that given these facilities both yield per acre and the quality of cane would record substantial improvement.

7.4.1. We have given in Appendix V three statements—one showing the acreage under sugarcane year by year from 1950-51 to 1959-60, the second showing the yield per acre in several sugarcane growing States during those years and the third showing percentages of recovery during the period from 1948-49 to 1959-60. It is noticed that sugarcane acreages were rising steadily during 1950-51 and 1951-52 when the price of cane was Rs. 1.75 per md. Subsequently, when the price was brought down to Rs. 1.31 per maund in 1952-53 there was a fall in acreage, but this fall was not arrested when the price was raised to Rs. 1.44 per md. in 1953-54. Thereafter, although the cane price remained unchanged the acreage showed a steady rise and reached 5.057 million acres in 1956-57 which was higher than the acreage achieved during 1951-52 when the price of cane was as high as Rs. 1.75 per md. There was a slight fall in acreage in 1958-59 to 4.803 million acres but it improved to 5.178 million acres during 1959-60 when the price was raised to the current level (Rs. 1.62 per md. for delivery at the gate and Rs. 1.50 per md. for delivery at out-centres). These facts indicate that the current minimum prices fixed by Government are not low.

7.4.2. We give in Appendix VI data regarding the cost of production of cane received by us from different quarters. Since, as stated above, we have ourselves attempted no costing of cane, we express no judgment on the cost data given in the Appendix. It will be observed that these data relate to different years and different conditions of soil, climate, etc. In the absence of details we have also no means to assess the correctness of the methods and procedure employed.

7.4.3. The Government of U.P. which has the largest area under cane cultivation, replied that it had no information on the cost of cane cultivation *vis-a-vis* alternative crops. On the basis of a sample survey in the State in 1955-56 and 1956-57 the Government of Bihar have indicated that the cost of production of cane per maund at delivery centres worked out to Rs. 1.06 in North Bihar and Rs. 1.36 in South Bihar. The Government of Madhya Pradesh have stated that the average cost per maund of cane is Rs. 1.22 and on an yield of 350 maunds per acre the net return which is Rs. 137 per acre compares favourably with the return from wheat, paddy and cotton whose growing period is shorter. Information has also been furnished by the Government of Andhra Pradesh indicating that the cost per maund of cane works out to Rs. 1.05 to Rs. 1.15. None of the cost figures furnished to us are reported to be based on any recent detailed examination. The Government of Maharashtra informed us that at their research station at Padegaon where the average yield has been about 52 tons per acre during the years 1956-57 to 1959-60 the average cost worked out to Rs. 39 per ton for *adsali* cane *i.e.*, Rs. 1.43 per maund. This data for a research station may not be representative of cane cultivation in general. The report of a committee of experts set up under the auspices of the Indian Central Sugarcane Committee which studied the cost of cane cultivation during the period 1956-58 is yet to be published. The Directorate of Sugar, Ministry of Food and Agriculture, informed us that reliable data on cost of production in various regions are not available. They affirmed, however, that the minimum sugarcane price is fixed every year in terms of clause 3(1) of the Sugarcane (Control) Order 1955, after taking into consideration the views of the State Governments, associations of sugar mills and cane-growers and also keeping in mind in a general way the provisions of the Order and expressed the view that the price of Rs. 1.44 per md. for delivery at the gate and Rs. 1.31 per md. for delivery at the centres fixed for the years 1953-54 to 1958-59 was remunerative compared with the prices of other essential commodities. But under pressure from State Governments and as an incentive to the growers, the price was raised to Rs. 1.62 per maund for gate delivery and Rs. 1.50 for out-station centres with effect from 1959-60. By and large, yields per acre in Maharashtra, Madras, Mysore and Andhra Pradesh have been higher than those in the sub-tropical belt in the Northern zone. Even if the costs of cultivation per acre incurred to realise better yields are higher, the cost per maund in such favourably placed areas should work out much lower. Though unverified by us the data that have been given seem generally to support the view that the control price of Rs. 1.62 per maund of cane in itself and as compared with the cost of alternative crops does contain an element of return over costs to the growers as reiterated on more than one occasion in Parliament by spokesmen on behalf of Government. If this position is conceded the basis for a deferred price to augment an inadequate minimum price would stand weakened.

7.5. As regards yield per acre there has been some improvement in a few areas recently (1958-59 and 1959-60) notably in Bihar and Andhra Pradesh but there was no corresponding improvement in quality with the result that by and large there has been no improvement in the overall recovery since 1957-58. Indeed, there has been little organised effort on the part of either the growers or the industry or the Government to improve the quality of cane. We have, however, noticed that a few farms in Maharashtra and elsewhere have shown growing awareness of the need for raising better crop and the managing agents of a group of mills in the South have been supplying fertilisers, cane carts, better seeds, pesticides, etc. to sugarcane growers. But in the absence of concerted efforts on the part of all concerned, the achievement of an enlightened few has not been able to raise the overall recovery percentage.

7.6.1. In paragraph 7.3 we have referred to the proposal of cane-growers outlining a remedy for the crisis caused by expansion of sugar output and accumulation of stocks. The proposal is that individual cane growers should undertake to deliver and sugar millers to accept certain stipulated minimum quantities of cane so that the present trend to excessive production and excessive deliveries of cane could be checked. In considering this proposal, it must not be overlooked that it is made in rebuttal of the suggestion of sugar millers to reduce the price of cane. We have given careful consideration to this proposal. It is clear that one inevitable effect of the proposed scheme would be that either the cane-grower will have no urge to raise the yield of sugarcane per acre or if he adopts superior techniques of cultivation, he will be induced to reduce the acreage under cane. The President of the Indian Sugar Mills' Association opposed this proposal as being impracticable owing to the very large number of growers (over 10,000) which a mill in the North had to deal with. We were not impressed with his arguments. A system similar to that urged by the growers' representatives is in force in the South. As the bulk of supplies to North Indian Sugar factories is made through co-operative societies it should not, in our view, be difficult to operate the scheme suggested by the growers. Its working in a controlled area could be even better regulated. In fact, this may give the co-operatives opportunity to play a positive role for improvement of the lot of cultivators instead of being as at present a permit issuing and commission collecting agency. But our grounds for rejecting the suggestions are different and more fundamental. Our experience till now indicates that the grower has no urge to raise the yield of sugarcane in which case just those cane areas which constitute the real problem of our sugar industry will be stabilised in their stagnation. What is equally serious, if cane price becomes the most important and stable element in a growers' income and, therefore, standard of life, the resistance to a transition to economic price of cane, even when a reduction is justified, will be intensified. Any procedure which gives the impression that the price of cane is sacrosanct even when it involves stagnation and sets a precedent favourable to it, is to be deprecated. Besides, it is a matter of some doubt whether the present predicament of the industry has been caused by excessive deliveries of cane from reserved areas as the industry alleges or greater availability of cane brought about by fall in demand for gur locally or for exports. The rebate in excise duties and allied concessions offered by Government, as the cane growers allege, have led the mills taking in more cane even from farther areas. If a restriction in the output of sugar is at all desirable, the priority in remedies should be given to the withdrawal of these special incentives which were meant to meet only a temporary situation and not to schemes such as those advocated by cane growers. On all these grounds, we do not commend the proposal of cane growers.

7.6.2. As a matter of fact, any policy restrictive of output of cane would go against our long-term policy for sugar. The Draft Third Five Year Plan sets the target of sugar production and consumption at 3 million tons for 1965-66 as compared with the 2.2 million tons output of 1961-62. If an allowance is to be made for export the target will have to be raised still higher. Since, in spite of the projected investment of the Third Plan, the incomes of the mass of people will still continue to run at moderate levels, a steady consumption of 3 million tons could be established only by reduction of costs and/or reduction in the excise and other burdens on sugar. In reduction of costs and promotion of exports, an economic price of cane will surely be a decisive factor. Any measures, therefore, which tend to stabilise the low yield of cane and perpetuate its high costs, must run counter to the desired lowering of the price of cane.

7.7. We now proceed to examine whether this scheme of deferred payment for growers which was conceived in time of high prices of sugar should be continued. As stated earlier, the scheme included in the Sugarcane (Control) Order has no parallel either in this country or elsewhere. The growers contend that the profits of a mill are earned by longer duration of the season and/or higher recovery and that as the grower helps the mill with supply of cane over long periods to extend the period of its crushing, he has a legitimate claim to a share of the higher profits. Further, as better recovery is almost entirely due to the supply of better cane, the grower should have a share of the extra earnings of the mill. Lastly, it was urged that cane, being a perishable commodity, should not be compared with other agricultural crops which have greater staying quality. We appreciate the growers' desire for a higher price for their cane ; in fact, cane with higher sugar content must get a better price than cane of average quality. Whatever might have been the considerations that weighed with Government to accept the need for deferred price in the case of sugar cane, the matter requires a re-examination. A deferred payment can be justified on the grounds that the initial payment was only tentative or that such payment gives incentive to adopt better technique of production to improve the quality of cane and to reduce costs. As stated in paragraph 7.4.3, the evidence collected by us indicates that the minimum price fixed by Government for sugarcane is not unfair and that it yields comparable or even better return in certain areas than that from alternative crops. Further, the scheme of deferred payment envisaged in the existing formula which does not take into account the quality of cane is unlikely to stimulate a grower to improve his technique of production or the quality of cane.

7.8.1. We also tried to assess whether the scheme of deferred payment has helped to improve the relations between the grower and the industry. Over large areas of the country particularly in the Northern Region it has only promoted bickering and agitation. We notice that East India Distilleries and Sugar Factories Ltd. and Parry and Co. which between them control about five factories in the South have been making deferred payments regularly to sugarcane growers on the basis of the SISMA formula. Although there was general appreciation that these companies were progressive and that if other factories particularly those in U.P. and Bihar had followed their example, much of the present dissatisfaction amongst growers would have disappeared, we heard complaints that the growers did not accept the companies' statement of actual realisations from sugar and that there was distrust and ill-feeling between the growers and the mills. On the other hand, we did not hear any complaint against the arrangement made by the States of Maharashtra and Gujarat under which a consolidated price is paid to the growers depending on the recovery percentages achieved by the factory in the just preceding season.

7.8.2. The scheme of a deferred price completely ignores the interests of consumers who have borne patiently the burden of high protection granted to this industry and of periodic shortages. In fact the Sugarcane (Control) Order enjoins Government to take note of this fact as price control of sugar is intended mainly in the consumer's interests. If Government are satisfied that the industry, by operating in a sheltered market, is making high profits, the proper course would be to mop up such profits by other measures rather than by directing such profits to be shared with the growers. The psychology of unrequited sharing could easily build up demands for price fixing from other participants in production, *e.g.*, labour.

7.8.3. On the whole we are of the view that the scheme of deferred payment which is not linked with the quality of cane, which completely ignores the interests of consumers and does not also promote good relations between the grower and the miller is not in the larger interests of the sugar economy and should be terminated as soon as possible. For improving the lot of cane growers and for stabilising the industry the steps to be taken must be found outside the price linking formula. We have dealt with this aspect in paragraph 13.

Application of the price-linking formula in U. P., Bihar and Punjab where prices are controlled.

8.1. The specific issues referred to us include an examination of the question whether the price-linking formula should be made applicable to regions where ex-factory prices have been fixed. The representatives of the industry have urged that the question of sharing does not arise where sugar prices are controlled. They contended that where such control existed, a manufacturer could not have realised anything more than the fair price which has been fixed for him under the Sugar

(Control) Order, 1955. They urged that the price fixed on the basis of the Tariff Commission's schedules in their case is as much a fair price which is guaranteed to them as the statutory minimum price payable to the grower. The price that is fixed under the statute applies to the region as a whole and, therefore, the return allowed to the industry in the region should not be allowed to be diminished by any sharing arrangement. They also urged that even if in any year the controlled price of sugar fixed by Government was more than the fair price for the duration and recovery for the season, the difference would be taken into account to fix the price for the following year and, accordingly, in the aggregate no amount would be left with the factories above the fair price for them to share with the grower. The East U.P. and Bihar branches of the Indian Sugar Mills' Association have sought exemption from the application of the formula for factories in their area on the grounds that their plants are old and are most in need of rehabilitation, that their average production per unit is low and that it was recognised by Government in the past when higher prices were conceded or a lower share for the grower allowed in applying the 1953-54 formula.

8.2. The State Governments concerned have, however, expressed themselves in favour of the application of the price-linking formula to U.P., Bihar and Punjab where prices have been fixed according to the Tariff Commission's schedule. It will be useful to reproduce their arguments in full. The U.P. Government have stated as follows:—

"The claim of the industry that no price-linking scheme should be enforced during the period of control is untenable, firstly because the controlled price is based only on estimates of recovery and duration of season, whereas the actuals are different from estimates. For instance, for the 1959-60 season the controlled price of sugar even according to the Tariff Commission's cost schedule should be in the neighbourhood of Rs. 37 (round) for the U.P. factories whereas the controlled price is Rs. 37.85 which is apparently based on lower estimates of recovery and season. Secondly, a number of individual factories have a comparatively higher recovery and/or longer duration of season which means that they earn profits much higher than the return contemplated in the controlled price. It is, therefore, only just and fair that a suitable portion of such extra earnings should go to the cane-growers if a link between the cane price and the net realisation of a factory is to be maintained."

The Government of Bihar have stated as follows:—

"The profitable production of sugar depends mainly on supply of good quality of cane and long duration of crushing season. The factory will get more profit if the crushing season is longer and the quality of cane is good. It is the cane growers who are required to maintain the required output of cane and invest in raising the quality of cane. The cane growers, therefore, may not be debarred from getting a fair share in the extra profit earned by the factories on account of a higher sugar recovery and longer duration of the season of the factories even in the period of control. The improvement in the quality of sugarcane which results in increase in the sugar content of cane mainly depends on the efforts of cane growers."

The Government of Punjab have observed that—

"The formula serves as an incentive to the cane growers to improve the quality of their cane as well as its yield so that as a result of better recovery and longer period, they are able to share the profits. The formula will also stimulate the factories to work longer and with improved efficiency."

8.3. We have given the matter our careful consideration. In our view, with the introduction of ex-factory price control on sugar in July, 1958 and particularly with the adoption for that purpose of Tariff Commission's schedules given in its Report of 1959, the case for a price-linking formula allowing cane growers a share in the extra price, if any, realised by manufacturers loses its force. Our schedules were framed on a close examination of the costs of different regions. We accorded a return of 12 per cent on employed capital for the industry as a whole with the clear understanding that factories above average efficiency will reap a higher return while those falling below the line will have to be content with a lower rate. Such variations in the profits of individual units are inherent in price fixation on a uniform basis, and it is only natural that efficient units would stand to gain. If cane growers whose basic minimum price also includes an element of profit are now admitted to a share in the controlled price of sugar it will have to come either from the profits which were considered fair and allowed in our schedules or from the surplus which might accrue to the more efficient units. In either case it would be contrary to the basic conditions defined in our approach to the whole problem of the sugar industry.

Price-linking as short-term measure

9.1. We have stated in paragraph 7.8.3, that we do not consider the scheme of price-linking included in the Sugarcane (Control) Order, 1955 to be in the larger interests of the sugar economy and that it should be terminated as soon as possible. This still leaves the question as to what should be the policy for the period intervening between 1958-59 and now. As stated in an earlier paragraph the present formula was announced by Government for adoption on an all-India basis with effect from the 1958-59 season unless any alternative scheme was applied in a State or region in consultation with the State Government or Governments concerned. Such an alternative scheme has been in force in the States of Maharashtra and Gujarat where higher consolidated prices are payable for cane in lieu of the minimum price and deferred price contemplated in the Sugarcane (Control) Order, 1955 as subsequently amended. The existing formula makes no distinction between controlled and uncontrolled areas. However, before the 1958-59 season was out, our Report (1959) on the Cost Structure of Sugar and Fair Price Payable to the Sugar Industry had been submitted to Government. We prepared four regional schedules for determining the price of sugar and made provision in those schedules for certain expenses which involved re-consideration of the existing formula. Accordingly, the question of the formula has been referred to us for examination. During this period there had been no announcement by Government that they might cancel the provision for deferred payment in the Sugarcane (Control) Order. On the contrary, fresh amendments of the Order were issued so late as March, 1960 in order to bring within the scope of the existing formula the amounts realised by the factories from the tax concessions granted by Government. It is, therefore, difficult to ignore either the historical background in which the price-linking formula was evolved or the undertakings given which have nourished the growers' expectation of an additional payment over the minimum price. It would not be proper or feasible to withdraw from the decision to enforce on an all-India basis, subject to necessary modification which we have indicated in paragraph 10.5.8, the principles for payment of a deferred cane price included in the 1958 formula. Further, since sowing for the 1961-62 season has already taken place in most areas, the principle of price-sharing will have to be applied for that season also. For subsequent seasons, there is no *prima facie* justification for continuing an arrangement which is manifestly not in the best interests of the sugar economy and we recommend that Government should take steps to terminate the present arrangement as early as possible.

9.2. On the question of the application of the formula the industry drew our attention to a letter from Government of India, Ministry of Food and Agriculture (Department of Food) No. J.S.(S)/P.S./61 dated 10th April, 1961 to the Indian Sugar Mills' Association, relevant extracts from which are reproduced below:—

> "On the basis of the Schedule for the northern region and recovery and the duration attained in 1959-60 the ex-factory price in U.P. and North Bihar works out to Rs. 37.31 per maund of sugar. The price of Rs. 37.85 per maund had thus a margin of 54 nP. per maund. The current crushing season is still on and having regard to present trends and estimates of production, it is likely that the margin available this year may be somewhat larger. Government consider that the margin should suffice to enable the industry to meet not only the extra cost on account of Wage Board Award and other factors but also the losses on export quotas so far announced."

We cite this letter at this stage to dispel an impression that our schedules normally include margins to cover extra burdens like Wage Board Award or export losses. The practice of determining the sugar price for the ensuing year on the basis of the recovery and duration factors of the season of the closing year in accordance with our schedules and announcing it in advance will even out margins when followed over a period of years, but in any year picked up at random there are bound to be variations either way on account of the time-lag.

Amendments to price linking formula

10.1. We have explained in paragraph 5 how the 1958 formula came to be evolved. The basic principle is that growers supplying canes to sugar factories share with the factory owner the net surplus realised by the latter in the same ratio as the cost of cane bears to the factory's cost of production of sugar during that year excluding taxes. Quite apart from the fact that the formula requires amendment in view of the acceptance by Government of the regional cost schedules suggested in our Report of 1959, the main defect of the formula is that with every rise in the minimum price of cane the share of the grower rises. Prices of sugarcane may be raised in terms of article 3(1) of the Sugarcane (Control) Order, 1955 on considerations other than a rise in the cost of production of cane and therefore a correlation of the sugar price with the cane price is unsound. It should be remembered that while the manufacturing cost of sugar is properly regulated in our schedule, there has been no proper determination of cost of cane. Hence the basis of sharing of price on an alleged cost basis under the formula is non-existent and fallacious.

10.2. The U.P. Co-operative Cane Unions Federation Ltd. has suggested a schedule (Appendix VII) which links deferred payment to the recovery percentage and duration of the season. According to this schedule no deferred payment is due when the recovery percentage is 9.5 per cent or lower and the duration of the season falls below 119 days. Thereafter for every rise in recovery percentage by 0.1 per cent, an additional sum of 2 nP. per md. of cane is payable. Similarly, for every increase of 10 days in the duration of the season over 119 days, a further sum of 2 nP. per md. of cane on supplies made after the 31st December becomes payable. This table proceeds on the assumption that a price calculated on the basis of a duration of 119 days and 9.5 per cent recovery is fair to the industry. It also assumes that even when the duration and the recovery improve, the realisation per maund of sugar will continue to remain at the same rate as when the industry attained a duration of 119 days and recovery of 9.5 per cent. An arrangement like this would be inoperative in a controlled economy in which prices are revised from time to time and irrelevant in an uncontrolled economy in which prices fluctuate according to market conditions. In times of shortages and abnormally high prices the application of the table would deny to the cane-grower the full advantage of these prices.

10.3. The Governments of U.P. and Bihar have also suggested a formula for sharing the extra realisations on sale of sugar over and above the fair ex-factory price to be worked out for each factory on the basis of our schedules. This is expressed as follows:—

$$\frac{X}{100} \times \frac{S-F}{C}$$

where S is the average selling price per maund of sugar as adjusted to standard grade, or the statutory price fixed by Government for controlled regions;

F is the fair ex-factory price to be worked out for each factory;

C is the quantity of cane consumed per maund of sugar; and

X is grower's share.

Initially the State Governments suggested the following slab for X:

50 per cent where the difference between S and F is up to Rs. 2.

55 per cent where the difference is between Rs. 2 and Rs. 5.

60 per cent where the difference is over Rs. 5.

Finally they suggested a fixed figure of 65 per cent. This formula was discussed by a Joint Advisory Committee appointed by the State Governments but it could not be finalised owing to the opposition of the representatives of the industry in the Committee who expressed the view that it was neither possible nor necessary at the State level to lay down an alternative formula or to go into the merits of any such formula.

10.4. The basic advantage of the formula of the U.P. and Bihar Government is its simplicity. In the controlled region both 'S' and 'F' are known factors. Apart from the fact that it has the support of two State Governments in the Northern Region in which lies the largest acreage under cane, it was clear to us from the large volume of evidence, oral and written, collected by us that cane-growers, by and large, had shown themselves to be favourably inclined to this formula. In the circumstances, we consider that if a formula is to be evolved for the interim period from the 1958-59 season, it should be modelled after U.P. and Bihar Government's formula. The crucial part of any formula, however, is the percentage share of the cane-grower. After discussing the matter at length at different conferences with both the mill industry and the growers' representatives we were able to get some accord on the following points:

(a) A sharing between the grower and the manufacturer of the extra realisations should be made after appropriation of the taxes payable by the manufacturer on his residual share;

(b) As regards 'X' the percentage share, the growers claimed that it should be exactly in proportion of the cost of cane to the cost of sugar which at current levels is, according to them, not less than 75:25. The representatives of the mill industry who had been advocating a share on 50:50 basis after payment of taxes and meeting cost incidents were agreeable to raise the ratio to 60:40 in favour of the grower.

10.5.1. Various increases have been claimed by the industry on account of higher cost of materials, freight, packing charges, Wage Board Award, export loss, etc. Many of these items will be covered by the margin for contingencies included in our schedule. As regards the higher payments on account of the final Wage Board Award, the replies received from the factories to our questionnaire indicate that there is considerable variation in the amounts claimed by factories on this account. This is understandable as the scales of wages in different factories are not uniform. Although it has not been possible to verify the incidence of increase claimed by individual factories, we observe that when these claims are adjusted to a particular rate of recovery and duration, there is considerable uniformity. The incidence of increase in salaries and wages due to Wage Board Award has been estimated by us and is given in Appendix VIII. This estimate has been adjusted for (i) the elements of gratuity and bonus which should come out of the return provided for the industry and (ii) the provision for the interim Wage Board Award in the margin for contingencies. We have also allowed a suitable increase in the return for the 1960-61 and 1961-62 seasons on account of the higher incidence on cost due to the Wage Board Award.

10.5.2. As regards loss on sugar exports, we understand that a quantity of 1 lakh tons has been exported involving a loss of Rs. 4.5 crores. Meanwhile Government are taking various steps to further exports without involving direct loss to producers and on the success in this regard will depend the need for including or not an element for this purpose in any price sharing formula. We have been furnished by the industry with a statement showing export loss for the period from 1st May, 1958 to 30th April, 1959 and 1st May, 1960 to 30th April, 1961. Since this cannot be verified by us and the factor will in any case have to be determined by Government we cannot fix the element for this purpose for each year in the sugar prices.

10.5.3. The industry has also claimed that the requirements of working capital have gone up on account of heavy stocks which they have been carrying for some time. We have gone into this question carefully and are of the opinion that the relief that has already been granted to the industry in the shape of deferred payment of excise duty, concessions in cane cess etc. should go a long way to diminish dependence on borrowings. We do not, therefore, consider that an extra element should be included in the return on this account.

10.5.4. The Indian Sugar Mills' Association has also claimed that deficits of previous years should be adjusted against the profits of the succeeding year. We see little justification for it as the industry will share only the extra realisations. After all the deferred price paid is only in respect of supplies made to it during a year and as the Control Order provides for general allowances, exemption in case of losses, etc. the aggregation of losses over a period of years would be totally unjustified.

10.5.5. After considering the points made by the interests concerned we are of the view that the percentage share of the grower should be so calculated that after payment of taxes by the producer (sugar mill) on his share, the balance retained by him will bear to the share of the grower a ratio of 40:60. At the present level of company taxation, the share of the grower would work out to 45 per cent approximately while the share of the miller would be 30 per cent, the balance 25 per cent being represented by taxes on the share of the producer.

10.5.6. As regards the question that the price-linking should not apply to areas where there is control on price of sugar, the attention of the industry was drawn to the minutes of the second meeting of the Sugarcane Price-linking Advisory Committee held on September 26, 1960, at Vidhan Bhavan, Lucknow at which its representatives expressed the view that the industry was prepared to disburse the deferred price in respect of 1958-59 season on the basis of 1958 formula, as soon as the Central Government announced the factor 'X' in respect of that season. As for the 1959-60 season, the industry's representatives also stated at the meeting that the deferred price would be payable only after the entire stocks had been disposed of by the sugar factories. We pointed out to the industry's representatives who attended the public inquiry at Bombay that the above Committee was appointed by the State Governments of U.P. and Bihar to devise an alternative formula for sharing the higher selling price of sugar at a time when control over price of sugar had been imposed in those States and as the industry's representatives did not then enter any caveat as regards exemption of control areas, the present attitude of the industry was not consistent with its earlier policy. In view of the considerations urged in paragraph 9.1 we are of the view that the interim arrangements for payment of deferred cane price should apply to areas where the price of sugar is under statutory control.

10.5.7. A claim for settlement of arrears alleged to be due on the basis of voluntary agreements by mills for period 1954-58 was placed before us. We declined to consider it as it fell outside our terms of reference.

10.5.8. *New formula.*—We recommend that the formula given below which is a modification of the U.P. and Bihar Governments' formula be adopted for application *on an all-India basis*, for the seasons 1958-59 to 1961-62 for computing the deferred price payable to the cane grower.

$$\text{Deferred cane price per maund} = \frac{X}{100} \times \frac{S-F}{M} - Y$$

where

S is (i) statutory price of sugar fixed by Government from time to time in controlled regions, or

(ii) actual realisation for sugar in other regions (including differential freight advantage) ;

F is fair price to be worked out for each factory based on its duration and recovery according to the relevant schedule in our Report (1959) on the Cost Structure of Sugar and Fair Price payable to the Sugar Industry, subject to the following adjustments:—

Add (a) Rehabilitation allowance per maund of sugar as may be fixed by Government,

(b) Export loss incidence per maund of sugar for each factory,

(c) Rise in costs subsequent to the Tariff Commission's inquiry in 1959, which in our opinion, cannot be absorbed by the margin for contingencies included in the schedule as well as consequent rise in return ;

M is the number of maunds of cane crushed (including driage subject to a ceiling of 1 per cent on the weight of sugarcane purchased at centres other than the factory gate) to produce one maund of sugar ; and

Y is the actual excess price paid per maund of cane over the statutory minimum.

10.6. The next question relates to the sharing of the incentives which have been given by Government to increase the production of sugar. As stated in the Government Resolution the industry has agreed to the sharing of such incentives but has suggested that a simpler formula should be devised. We recommend that this element should be shared with the grower in the same ratio as suggested for sharing the extra realisations over and above the fair ex-works price. The industry has represented that as it has to draw cane from longer distances for earning these incentives, the extra expenses incurred on such longer lead should be adjusted before the amount is allowed to be shared with the grower. We have given this matter our careful consideration. Extra expenses normally incurred by the mills have already been included in our schedule. The extra expenditure over and above that amount varies from unit to unit and any claim by the industry on this account is likely to be disputed by the grower. Having regard to the fact that the extra incentives are substantial and that the mills' share under our scheme would be 30 per cent of such incentives, we are of the view that extra expenditure, if any, incurred on the longer lead should be met out of the share retained by the industry.

10.7. We further recommend that the amounts calculated under paragraphs 10.5.8 and 10.6 should be treated separately—that is, the deficit, if any, under one should not be allowed to be set off against the grower's share under the other. Otherwise, it is likely to impinge on the small share that the greater part of cane growers delivering cane to the majority of factories might receive.

10.8. On the basis of our recommendations in paragraph 10.5.8 we have constructed schedules of deferred prices payable by factories in U.P., North Bihar and Punjab for the season 1958-59. Similar schedules have also been prepared for 1959-60 assuming an export loss of 50 nP. per maund. Since price control was imposed on South Bihar factories in April, 1960, we have prepared a schedule for South Bihar factories also for the 1959-60 season. The schedules for 1959-60 will, however, need adjustment, if the actual incidence of loss on export turns out to be different. All these schedules are given in Appendix IX.

10.9. *Interim arrangement.*—We have made it explicit that we do not desire to continue the existence of any price-linking formula a day beyond what is required by the obligations to which the Government is committed by its declarations, *i.e.*, beyond the commencement of 1962-63 season. We are apprehensive of the many risks to which the operation of such a formula must expose our sugar economy and in our opinion, these risks are likely to be aggravated the longer such a formula is allowed to operate. There is even a danger that the inevitable growth of pockets of vested interests might even imperil the implementation of the permanent solution which is ardently desired by all interests. At the same time, we are not in a position to estimate the interval which will be required to put into full operation the scheme of payment by quality which we recommend as the long term solution. Taking into account the number of factories, the number of cane growers and their social habits, the difficulties of obtaining requisite staff and lack of facilities for chemical tests, the interval might well prove much longer than what we envisage. Knowledgeable persons have placed the interval at from 5 to 10 years. In these circumstances, it would be desirable to put into operation on the expiry of the linking formula an arrangement which is better than the present system and also nearer to our final goal. Such an arrangement could be the offer of a collective incentive to all cane growers attached to a factory and take the form of a premium element in the price of cane depending on the extent to which the average recovery of the preceding crushing season is an improvement on the previous average. Thus at present the sugar price in the controlled region is determined on the basis of the minimum cane price announced by Government in terms of Section 3(1) of the Sugarcane (Control) Order and the twin factors of duration and recovery. Instead of fixing a minimum price for cane without regard to its quality as at present it could well be replaced with a table of prices for different recovery percentages of cane. We are not ourselves in a position to indicate the differentials between the several steps in the table as we have not found it possible to go into a detailed examination of cane costs. The recovery percentage in different regions varies from 9 per cent to 12.5 per cent. It should be possible for the National Sugar Institute to frame a table of prices for recovery percentages of (a) up to 9 per cent, (b) between 9 and 9.5 per cent, (c) between 9.5 and 10 per cent and so on. The extra cost of production of better qualities of cane in the several regions, the economies accruing to the mills from the use of better cane and the incentive necessary for the cane growers to improve their yield should also be taken into account. The price payable by a factory for cane at the time of purchase will be that corresponding to the recovery percentage attained by it in the previous season and it will not be required to pay anything extra on account of fluctuations in sugar prices during the season. Such a system might well generate the pressure needed for general improvement of quality of cane in the factory area and pave the way for an easy transition to quality payments to individual growers. Like the arrangements in force in Maharashtra it may also promote an amount of stability among all sections of the industry.

Rehabilitation

11.1. Our terms of reference require us to examine whether the claim of the industry to a rehabilitation allowance before cane growers are admitted to a share in the price is justified and to indicate the rate of the allowance. Since Government has accepted our regional schedules for fixing the sugar price and agreed that there is no need for inclusion of rehabilitation allowance in them, it is clear that a revision of the cost basis of these schedules is ruled out. It is true that the industry has never reconciled itself to the exclusion of a rehabilitation element in our regional schedules. But this matter can now be considered by us only in relation to cane and sugar price-linking formula.

11.2. The cane growers' associations have without exception denied the claim of the industry to a rehabilitation allowance. They have argued that the Tariff Commission has itself excluded a rehabilitation element from its regional schedules for price-linking; secondly, that most sugar factories and particularly the old ones have during their existence made profits which aggregate several times their initial and subsequent investment; and thirdly, that their depreciation funds, if properly conserved should be adequate for replacement. In short, the cane growers maintain that if sugar factories fall short of funds for replacement and renovation, they have to blame their own lack of foresight and improvidence.

11.3. In support of their claim for rehabilitation as a prior charge, the sugar industry points out that the provision of depreciation in our schedules was not meant to cover rehabilitation requirements—which is indeed a fact. It has cited the National Council of Applied Economic Research for the view that in computing depreciation allowance, the value of assets should be adjusted by an index-number of changes in the replacement costs of such assets. The industry has also invoked in justification of its claim the recent ruling of the Supreme Court in the case of the A.C.C. that rehabilitation in addition to admissible depreciation is a prior charge on the surplus available for the purpose of arriving at the bonus due to workers. It is noticed that this ruling of the Supreme Court has been adopted in subsequent decisions. The industry further argues that the extra price to the cane grower allowed under the price-linking formula is on par with the bonus to factory labour since both are dependent on the surplus from sales realisations.

11.4. Even the State Governments have expressed diverse opinions on the subject. The U.P., Punjab and Maharashtra Governments are not in favour of a rehabilitation allowance as an element prior to the determination of the extra share of the cane-growers. In the opinion of the Bihar Government, the adoption of the cost schedules framed by the Tariff Commission itself invalidates the claim for rehabilitation. The M.P. Government concedes the claim for rehabilitation but wants to load it on the consumer.

11.5. There seems to be a misapprehension about the exclusion of a rehabilitation element from our regional schedules. In reaching our decision to exclude the rehabilitation element, we had taken into account the progress of the industry, the resources it already possessed and above all, the fact that more efficient units would earn profits above the average allowed by us to the industry as a whole. It was not our intention that extra profits of the units above the average should at any stage be denied to them. For units falling below the average, we recommended special assistance. In making these recommendations, the difficulty which weighed with us most was that a uniform element of rehabilitation included in a common price would tend to favour the more efficient units with funds in excess of their needs and impose an avoidable burden on the consumer.

11.6. On the ruling of the Supreme Court regarding bonus to factory labour and the parity which the sugar industry seeks to establish between this bonus and the extra price for cane claimed by cane growers, we refrain from expressing any opinion. It would be unprofitable to discuss in this Report whether wages paid to factory labour bear analogy to the *ad hoc* prices fixed by Government from time to time for cane. Even if it is true that the industry made continuously phenomenal profits since protection was granted, for it to anticipate and make provision for a five to six times inflation of capital costs even as late as 1945, would be to presume a foresight not given to human beings—not even to businessmen. The fact remains that until more efficient units are erected, the elimination of even a few units for lack of renovation and rehabilitation would spell nothing but harm to cane growers, millers and consumers at large.

11.7. We, therefore, accept the plea that an element of rehabilitation should be allowed as a prior charge in any price-profit sharing formula. But we cannot agree that as this appropriation is likely to be taxed, the figures should be grossed up. As the tax liability stood regardless of the sharing formula, compensation for it in applying the formula is not fair. The Indian Sugar Mills' Association has worked out the cost of replacement of their overaged assets on the basis of multipliers and average index numbers. According to these calculations, in addition to the depreciation included in our regional schedules, the net amount of rehabilitation per maund of sugar would range from 27 nP. to Rs. 2.09 the regionwise amounts being Rs. 2.09 for the Northern Zone, Re. 0.71 for M.P., and Rajasthan, Re. 0.28 for Maharashtra and Re. 0.27 for Southern States. These amounts appear *prima facie* to be high.

11.8. During the course of the public inquiry, we impressed on both the sides to the dispute that what the industry and the economy need most on this vexed question of rehabilitation is not meticulous arithmetic but a spirit of mutual understanding and accommodation. In the absence of a cost investigation, we have indeed no material before us on the basis of which we could suggest a precise amount for rehabilitation. In the light of the history and evolution of the sharing formula, it would be inappropriate for any party to the question to overlook the human factor that thousands of growers have been encouraged to entertain expectations of receiving a deferred payment out of extra realisations of sugar factories. It would be hardly fair to offer with one hand a price-linking formula for a share in the extra realisations and to frustrate it with the other by incorporating in it a high amount for rehabilitation claimed by the industry. Taking all circumstances of the case into account, we recommend that an *ad hoc* amount of 40 nP. (for 10 per cent recovery and duration of 150 days) should be provided as the rehabilitation element when applying the formula in the Northern region, and 20 nP. for Madhya Pradesh and Rajasthan. As regards other regions, having regard to the state of the industry there, we are of the opinion that no provision is necessary. This element for rehabilitation is allowed specifically to help the mills to cover the extra cost of replacement of old plant and machinery and in order to ensure that it is not applied otherwise, we further recommend that all funds accruing under this head may be separately appropriated in the accounts to this purpose. We give in Appendix X a table showing the allowance for rehabilitation applicable for various durations and 10 per cent recovery in respect of factories in the Northern Region and Madhya Pradesh and Rajasthan.

12.1. *New Factories:*

12.1.1. One of the issues referred to us is to examine the effect of price-linking formula on the establishment of new factories with heavy capital outlay and whether any concession should be allowed to them in the matter of the application of the formula. It may be stated here that the Gopalakrishnan Committee recommended that all new sugar factories should be exempted for two years from payment of any extra price since it takes about two years for a new factory to attain normal working conditions. The Sugarcane (Control) Order, 1955 includes a provision which enables the Central Government to exempt new factories for such period as may be specified. In a written memorandum, the Indian Sugar Mills' Association urged that new factories which required capital of the order of Rs. 1.35 crores should be granted exemption for five years from the application of the formula. The Governments of U.P. and Bihar have recommended exemption for the first three years. The former Government has, however, added a caveat, namely, the special incentives in any particular year should be shared by the new factories with the cane growers. The Punjab Government has suggested exemption for a period of ten years in the case of the new mills which have not achieved recovery of 9.5 per cent or above. The Association of Cane Growers has generally opposed the grant of exemption to new factories. At the public inquiry in Bombay the representatives of the Indian Sugar Mills' Association urged, in modification of the earlier suggestion in the written memorandum, that newly established factories be exempted from the operation of the price-linking formula till they make profits after providing for development reserve.

Exemption

12.1.2. We have given the matter our careful consideration. In view of the establishment of manufacture of sugar making machinery in the country, new mills are being installed with indigenous machinery. No data regarding operational costs of such new factories are available. Further, these factories enjoy certain fiscal concessions such as tax relief for a period of five years. Most of the new factories which have come into being or are in course of erection are co-operative sugar factories where the scheme of price-linking is not of much importance. On the whole, we are of the view that the period of exemption from the obligation to share extra realisation should be limited to a period of three years. We recommend therefore, that new sugar factories may be exempted from the payment of a deferred cane price referred to in paragraphs 10.5.8 and 10.6 for a period of three years from their establishment.

12.2. *Exemption for factories in Maharashtra and Gujarat:*

12.2.1. As stated in paragraphs 5.1.3 and 7.1 the system of sugarcane prices in the undivided State of Bombay and later in the States of Maharashtra and Gujarat is not in line with that in vogue in the rest of India. Even before the statutory formula of 1958 was published, a single consolidated price per maund of cane for the undivided State of

Bombay used to be determined from time to time by the State Government in discussion with the interests concerned. From the 1959-60 season the State Government introduced, with the approval of the Government of India, a slab system for payment of a consolidated price for sugarcane. This price was based on the average sugar recovery percentage for the preceding crushing season which ranged from Rs. 52 per ton of cane when the recovery percentage was less than 11 to Rs. 56 per ton when the recovery reached 12½ per cent. The Government of Maharashtra has stated that there is considerable advantage in adhering to this system of paying a total minimum price for cane once and for all instead of the statutory minimum price coupled with the deferred price payable after the close of the season. They claim that agriculturists and mills alike get the advantage of stability in regard to cost of production and the cause for disputes is also eliminated.

12.2.2. In the course of our inquiry we had occasion to observe that the alternative arrangements in vogue in Maharashtra have been welcomed by the interests of growers and have also been accepted by sugar factories. It has led to good relations between the growers and the sugar industry and has promoted stability all round. Further, as we are recommending the continuance of the deferred payment arrangements for a limited period only, we do not think that the system in vogue in Maharashtra should be disturbed. We recommend, therefore, that the price-linking formula or the formula for sharing the advantages of incentives to production which we have recommended in paragraphs 10.5.8 and 10.6 respectively need not be applied to the State of Maharashtra, if it so desires.

12.2.3. As regards Gujarat State, we are informed that the slab system of cane price prevalent in Maharashtra has been adopted there. No representation has been received from that State that it would like to switch over to the price-linking formula. We have no objection to factories in that State being exempted from the operation of the formula if it prefers the present slab system.

12.3. *Co-operative sugar factories:*

12.3.1. During the course of our inquiry and in the representations submitted to us, we have noticed a general desire on the part of co-operative sugar factories to be excluded from any all-India scheme of price-sharing. The Registrar of Co-operative Societies, Madras and the South Indian Sugarcane Growers' Association have supported this view. The Punjab Government has, however, suggested that deferred payment may be permitted in respect of co-operative societies on the basis that it is converted into additional shares till such time as the outside liability of the units is cleared. The co-operative factories in Maharashtra further represented that they should be exempted from regulation of cane prices on the grounds that the interests of cane-growers and owners of the factories are identical. Their request has been supported by the Government of Maharashtra in the following words:—

> "It (the Government of Maharashtra) is unable to subscribe to the view that the co-operative sugar factories are either amenable

to or shall be brought under the purview of any slab or price-linking formula of Government—even the procedure in force in the State for limited company sugar factories. Quite definitely in the case of these factories the interest of the cane grower and the sugar factory society, in which the same persons are also members, can hardly be distinguished and, in accordance with the fundamental principle of co-operation, the individuals concerned do not sell the sugarcane to the factory, whatever be the legal connotation prescribed or contemplated. It is added that the co-operative sugar factories have perforce to depend for a large portion of their block capital on loans and it is necessary that they build up their capital resources as early as possible. The application of any formula compelling them to make substantial payments on delivery of the cane for processing will affect not only the capital accumulation, consequently involving heavy interest charges, but also their borrowing capacity. Under one of their bye-laws co-operative factories can borrow up to a limit of eight times their capital *plus* reserves *minus* accumulated losses. Since the growers are personally interested in the result of the factory, they are, and would be voluntarily foregoing the extra initial payments in the interests of the continuous sound financial position of the factory. The State Government will adhere to this stand irrespective of anything which might be urged even in future."

12.3.2. In regard to regulation of cane prices, while admitting the general force of this argument, we do not support the implication that it is a matter of indifference whether extra funds fall into the hands of cane-growers as income or are conserved with the factory to meet certain priorities. The co-operative units start with heavy liabilities to the Governments and public institutions. It is desirable that these liabilities should be liquidated while sugar prices are high—an advantage which may not last long. Secondly, co-operative units have to justify themselves ultimately by achieving standards of amenities, efficiency and progressiveness set by the best units in the private sector. These standards would be attainable only by heavy investment which means cultivation of foresight and self-restraint attainable in a society but not by individual farmers. However, having regard to the strong desire of co-operative factories in general and also to the fact that the prosperity of such factories accrues ultimately to the growers, we have no objection to co-operative factories being exempted from the operation of the formula recommended in paragraph 10.5.8 as regards deferred cane price and from the sharing of advantages accruing from incentives recommended in paragraph 10.6. We recommended therefore that necessary steps be taken by Government in this behalf.

12.3.3. We are informed that co-operative factories in Maharashtra depend on non-members for a negligible portion (2.4 per cent) of their requirements (0.3 lakh tons as against the total requirements of 12.5 lakh tons of 11 out of the 14 co-operative factories) of cane. If the cane-grower-*cum*-owner of the co-operative factory agrees, in the interest of the factory society, to be satisfied with a price lower than that fixed by statute, we would not raise any objection. But this relaxation should not apply to supplies obtained from outside growers, that is, those who are not members of the co-operative factory. Such supplies must be paid for in accordance with the system in vogue in the particular area, namely, slab system of consolidated price in Maharashtra or the minimum cane price coupled with deferred payment in other areas.

12.4. *Factories running at a loss or earning inadequate profits.*—The Sugar Cane (Control) Order, 1955 enables the Central Government to exempt a producer wholly or partially from payment of deferred prices *if the audited accounts of* the factory for the season in which sugarcane is purchased show that either no profit accrued to the producer for the season or its profit would be less than the profit taken into account in determining the value of "X" referred to in the price-linking formula. We are informed that this saving clause, which is designed to protect the interests of weaker units, is likely to lead to serious administrative difficulties and also bitter controversies between the industry and growers. Further, since the financial year of a factory does not usually coincide with the sugar year, it would be difficult to relate the profit or loss in a financial year to the operating results of a particular sugar year. At the same time, it is desirable that weaker units should not be made liable, wholly or partially to payments under paragraphs 10.5.8 and 10.6 if such payments result in serious inadequacy of return envisaged in our relevant scheme or actual losses in the operation of a sugar year. Such cases should, however, continue to be examined individually on merits. If, therefore, a sugar mill desires that on grounds of financial stringency it should be exempted, wholly or partially, from payment of deferred price it should apply to Government for such exemption with all relevant documents regarding its production, sales, financial accounts, etc. of the particular year.

Long-term Solution: Payment for cane by quality

13.1. We have stated earlier that we do not support the existing system of payment for cane based as it is on an *ad hoc* minimum price of cane and a future share in the profits of the manufacturer. The recent changes in cane price which bore no relationship to trends of sugar price clearly bring out their empirical character. The *ad hoc* price thus tends merely to stimulate expectations and agitations which have no relationship to objective facts. The prospect and computation of the share in sugar price has proved a prolific cause of strained relations between cane-growers and sugar millers. The guarantee of payment by mere weight has blasted all incentives to improvement in the quality of the raw material. We have no doubt that the only way out of this stalemate would be to institute a system of payment which combines a floor price for cane of average or minimum quality with a proportionate or progressive scale for quality differentials. We were pleased to note that all interests in the industry recognise payment on quality as the most rational and appropriate basis for cane-sugar relationship.

13.2. Under a system of payment by quality, the floor price for cane will have to be determined in relation to the costs of cultivation including profits of cane of average quality and profit from other alternative crops. The costs of cultivation and average quality of cane will no doubt vary from region to region. But we would not support for this reason different floor prices for different regions. If the floor price protects adequately the cultivator of cane under relatively disadvantageous conditions, it will be more than enough to cover cultivators of all other regions with higher average quality of cane and higher yields per acre since it is contemplated that these cultivators will receive a progressive bonus for their better quality cane so as to compensate them adequately for their higher investment, if any. If more favourable regions as in Maharashtra and the South were allowed to establish higher floor prices which are out of relationship with their costs of cultivation, there is a risk that the growth of sugar factories in these areas will be slower. This is not in the long term interests of the country. As indicated above the scale of premiums to be paid for each step in quality improvement will have to be so framed on a proportionate or progressive basis as to cover the higher investment in regions where the sugar content starts on a higher level and attains much higher peaks than elsewhere.

13.3. On the recommendation of the Development Council for the sugar industry, a scheme has been introduced since 1956 in a few factories for evolving a proper method of testing the quality of cane so that it could be made the basis for payment of premium or additional price to cane growers. The object is ultimately to ensure assessment of quality as far as possible for individual growers supplying cane to sugar factories (or for groups of growers in the case of small growers) and to regulate payment of cane price on the sucrose content of cane. The scheme is being worked for the past four years under the guidance of the Director, National Sugar Institute, Kanpur and is now working at the following factories:—

1. Burhwal Sugar Mills Co. Ltd., Burhwal, U.P.
2. Raza Sugar Factory, Raza, U.P.
3. The Bazpur Sugar Co-operative Factory, Bazpur, U.P.
4. The Deccan Sugar and Abkari Co. Ltd., Pugalur, Madras.
5. Kirlampudi Sugar Mills Ltd., Pithapuram, Andhra Pradesh.

The scheme also worked for some time at Daurala Sugar Factory of the D.C.M. Ltd., but was abandoned owing, it was alleged, to obstructions arising from rivalry amongst growers. For the successful working of the scheme supplies have to be regulated according to specified time schedule area-wise and proper marshalling of the cane at the mill yard according to schedule is essential; further, supplies of cane should come in such lots as represent testable quantity of individual growers or by a group of growers. A minimum of 4 minutes crush of any factory forms the testable quantity. On the basis of working in the above five centres the Director, National Sugar Institute considers that it is possible to evolve a suitable system whereby the quality of cane delivered at the gate of the factory can be assessed to the satisfaction of the growers as well as the millers. As regards out-station cane, it has not been possible to evolve a satisfactory scheme and the entire out-station cane is classified as one category. According to the Director, once the payment of premium to growers supplying cane of better quality is stabilised, it should act as an inducement to the suppliers of out-station cane to arrange to have their cane delivered at the gates. Based on this scheme, payments of bonus are being made for better quality cane in the factories where the experiments are carried out.

13.4. Except the Pugalur factory where an elaborate arrangement by Parry and Company exists for the survey and development of areas supplying cane to the factory, the staff employed by the National Sugar Institute to implement the scheme has carried out detailed surveys of the areas supplying cane to the factories. Such a field survey is essential for getting best results out of the scheme as it is only through it that a proper regulation of the planting of suitable varieties and supply of cane throughout the crushing season, which will avoid congestion at the factory premises and excessive loss of sucrose content through driage, can be evolved. In the case of factories in the Northern Zone which receive supplies from thousands of growers it should be possible as a first stage to arrange to have testing of supplies of groups of growers of the same village if the supplies by individual growers do not amount to the minimum crushing time of 4 minutes. Since supplies of cane are received by mills in the zone through co-operatives, it is essential that the latter should assist in making regulated supplies of cane at the mills' gates and also assist the mills in having a proper survey of the quality and age of the crop so that supplies of cane do not come in a haphazard manner which might adversely affect the mills' recovery and also deprive the growers of the benefit of premium for quality which could have been earned.

13.5. We watched the working of this system at the two factories (Burhwal and Pugalur) and had also the benefit of hearing the opinion of cane-growers on the subject. The administrative and technical arrangements made in each factory for the identification of each supply of cane, for the conveyance of corresponding sample of cane juice to the laboratory and finally for the measurement and record of quality of each supplier satisfied us both on grounds of accuracy and impartiality. We were made aware of some doubts on the part of cane-growers but in no sense were they such as cannot be allayed by mutual adjustments or association between factory authorities and cane-growers' representatives. The vital pivot of this whole system is the chemical expert at the laboratory who is an officer deputed for the purpose by the National Sugar Institute and, therefore, independent both of factory management and cane-growers.

13.6. We understand that the cost of working out a scheme outlined above for each factory would not work out to more than one nP. per maund of cane supplied. Considering the fact that the scheme for payment on quality is one which has the most direct bearing and acts as an incentive for production of quality cane we recommend that steps should be taken by both the Central and State Governments to introduce it on an all-India basis as early as possible. Further the State Governments who are levying the development cess on sugarcane should consider favourably the question of meeting the expenditure on the establishment of a testing unit for each sugar factory. An independent agency not dependent on the mill will alone ensure confidence of the growers.

Other observations

14.1. As we arrive at the conclusion of our labours, we note that the sugar industry finds itself for the second time in recent years in a peculiar crisis of over production. From 19.19 lakh tons in 1958-59, the output of the industry rose to 24.22 lakh tons in 1959-60 and is expected to touch about 30 lakh tons in 1960-61. Thus the target of 30 lakh tons set for the end of the Third Five Year Plan has ostensibly been reached at the very commencement of the Plan in 1961-62.

14.2. Unfortunately, this sudden expansion of output is a national embarassment and not a matter for self-congratulation. For, it has been achieved not by increased efficiency and falling costs either of cane cultivation or processes of sugar manufacture. It is partly the outcome of the stimulus of high price of cane which has increased the area under cane in U.P. where quality and yield continue to be low. In a large measure, the expanded production has been made possible by a substantial rebate in excise duty more than sufficient to cover the additional costs of transport of cane over longer distances, etc, *i.e.*, at public expense.

14.3. Despite expansion in output, little perceptible fall in costs is, therefore, visible which explains the peculiar hothouse character of these surpluses. With little margin for reduction in manufacturing costs, the heavy accumulating sugar surpluses could be disposed of in either or both of two ways. There is cogent social compulsion for unloading the surpluses on the domestic market with such reduction and adjustment of excise duty, etc., as would involve the exchequer in little or no loss. The surpluses could also be exported but only at a loss in the present conditions of domestic and foreign prices. The export potential of sugar-based industries is also affected by high prices of our sugar. But, rebate in taxation, etc. has its ultimate limit and must, in the end, raise the issue whether the costs are in line with the incomes of consumers. *Ad hoc* exports at a loss offer no long-term solution; rather they only highlight the absence of a policy.

14.4. The industry can stabilize itself and discharge its role in both the domestic and foreign markets only by a proper, progressive, unwavering, well-planned and rigorous policy of cost reduction. At every relevant place, we have already stressed the need to review the present minimum price of cane on a strictly economic basis. But a mere economic floor price of cane will avail little unless steps are initiated to raise the quality and per acre yield of cane. With this object in view, we have pressed for the earliest introduction of a system of payment by quality. We have disapproved of any scheme of restriction on acreage or output at the expense of improvement in quality or yield of sugarcane. Better return from cane can only accrue from proper crop planning and intensive cultivation of quality cane in suitable areas. In this regeneration of our cane agriculture the Central and State Governments have also to play a large role which must cover provision of irrigation facilities, construction of feeder roads in cane areas, dissemination of disease-free and improved varieties of seeds, control of pests and diseases, supply of manures and fertilisers at economic prices, etc. The activities of cane co-operatives need to be properly oriented for this purpose. We must record here that during the course of our inquiry, complaints on these and other grounds like the use of cess funds were painfully frequent, particularly in Bihar and Uttar Pradesh. The magnitude of the task and national interests at stake are well indicated by the fact that in 1958-59 and 1959-60 the figures for acreage under cane were 4·8 million and 5·2 million respectively and those for outturn were 70·5 million tons and 75 million tons respectively. The target for the Third Plan for cane production is as high as 100 million tons.

14.5. Sugar mills in turn must make their contribution by as rapid modernisation and expansion as possible. It is with this purpose in view that we have agreed to an element for rehabilitation and other concessions or exemptions. In this connection, note has to be taken of the fact that of 53 new factories licensed during the 1st and 2nd Plans, not less than 38 were co-operatives and that this trend is likely to continue. It is clear that the responsibility for future expansion will, therefore, fall only partly on private enterprise but very largely on social forces which shape co-operatives in which normal economic forces operate but feebly. We ardently desire that the implications of this situation should be properly appreciated in the proper quarters.

14.6. Before taking leave of our task, we feel compelled to say that it has not been easy for us to arrive at the conclusions we have reached. At each stage of our inquiry, we had an increasing awareness of the emotion and vehemence which permeate the whole controversy. In this situation, it was no pleasure for us to reject any views on either side held with obvious conviction and sincerity. What seems to add to the passions aroused on the issues is the psychological illusion of a struggle between poverty and affluence. The needs of thousands of poor cultivators of factory cane are easily visualised. But, it requires a special mental effort to conjure before the mind's eye thousands of other cultivators of cane and other crops, thousands of investors most of whom are not affluent and not organised and millions of consumers who are on the same economic level as suppliers of factory cane and who have suffered and are suffering the consequences of high costs and inefficient production. In our Report, as during the inquiry proceedings, we have not aimed at passing any judgment on these issues. Our endeavour has been rather to bring the parties together and to make our final recommendations with due care that expediency does not prevail over permanent interests of the economy and that the interests of the country are placed above sectional pressures. It is in this spirit that we expect our conclusions to be judged.

15. A summary of our conclusions and recommendations is given below:—

Summary of conclusions and recommendations

15.1. The scheme of deferred payment which is not linked with the quality of cane, which completely ignores the interests of consumers and does not also promote good relations between the grower and the miller is not in the larger interests of sugar economy and should be terminated as soon as possible.

(Paragraph 7.8.3.)

15.2. It is difficult to ignore either the historical background in which the price-linking formula was evolved or the undertakings given which have nourished the growers' expectation of an additional payment over the minimum price. Further, since sowing for the 1961-62 season has already taken place in most areas, the principle of price sharing will have to be continued for that season also. For subsequent seasons the present arrangements should be terminated.

(Paragraph 9.1.)

15.3. The payment of deferred cane price should apply to areas where the price of sugar is under statutory control.

(Paragraph 10.5.6.)

15.4. The formula given in paragraph 10.5.8 read with paragraph 10.5.5 should be adopted for application on All India basis for the seasons 1958-59 to 1961-62 for computing the deferred price payable to the cane grower.

(Paragraph 10.5.8.)

15.5. The sharing of incentives should be on the same lines as suggested in paragraph 10.5.5.

(Paragraph 10.6.)

15.6. The amounts calculated under paragraphs 10.5.8 and 10.6 should be treated separately *i.e.*, the deficit, if any, under one should not be allowed to be set off against the growers' share under the other.

(Paragraph 10.7.)

15.7. An *ad hoc* amount of 40 nP. for 10 per cent recovery for a duration of 150 days should be provided as the rehabilitation allowance when applying the formula in the Northern region and 20 nP. for Madhya Pradesh and Rajasthan. As regards other regions having regard to the state of the industry there, no provision for rehabilitation is necessary.

(Paragraph 11.8.)

15.8. As an interim arrangement, *i.e.*, after the termination of the present arrangement and pending introduction of payment by quality arrangement should be made to offer a collective incentive as in Maharashtra, to all cane growers attached to a factory in the form of a premium element in the price of cane depending on the extent to which the average recovery of the preceding season is an improvement on the previous average.

(Paragraph 10.9.)

15.9. New factories should be exempted from the payment of deferred cane price referred to in paragraphs 10.5.8 and 10.6 for a period of 3 years from their establishment.

(Paragraph 12.1.2.)

15.10. The price-linking formula for the sharing of advantages of incentives to production recommended in paragraphs 10.5.8 and 10.6 need not be applied to the States of Maharashtra and Gujarat if they so desire.

(Paragraphs 12.2.2 and 12.2.3.)

15.11. There is no objection to co-operative factories being exempted from the operation of the formula recommended in paragraphs 10.5.8.

(Paragraph 12.3.2.)

15.12. If a sugar mill desires that on grounds of financial stringency it should be exempted, wholly or partially, from payment of deferred price it should apply to Government for such exemption with all relevant documents regarding its production, sales, financial accounts, etc. of the particular year.

(Paragraph 12.4.)

15.13. Steps should be taken by both the Central and State Governments to introduce payment according to quality of the sugar cane delivered to the factory on an All India basis as early as possible.

(Paragraph 13.6.)

Acknowledgements

16. We want to acknowledge the assistance received from Sugar Mills Associations, the Cane Growers' Federation and the Cane Growers' Associations of various States, representatives of Central and State Governments who attended our inquiries and in particular the assistance we received from the Director, National Sugar Institute, Kanpur. We also wish to thank the State Governments of Bihar, Uttar Pradesh, Madras and Maharashtra for affording necessary facilities for holding our public inquiries at Patna, Lucknow, Madras and Poona respectively.

K. R. P. AIYANGAR,
Chairman.

S. K. MURANJAN,
Member.

J. N. DUTTA,
Member.

RAMA VARMA,
Secretary.

BOMBAY,
8th June, 1961.

APPENDIX I

(*Vide* paragraph 1.1)

GOVERNMENT OF INDIA

MINISTRY OF COMMERCE & INDUSTRY

New Delhi, the 3rd October, 1960.

RESOLUTION

No. 63(6)—T. R. /60.—It has been the practice for some years to pass on to the cane-growers an appropriate share of the price realized for sugar by factories. A formula for sharing the price was drawn up by the South Indian Sugar Mills Association in 1953 with the agreement of the cane-growers in their area. As that formula could not be applied to other sugar producing regions, a new formula was devised by the Ministry of Food and Agriculture for application to the whole country in 1954. While the principles underlying the new formula were generally accepted there were complaints from the cane-growers' organizations that the percentage share of the sugar price allowed to them was low. On the other hand, the sugar industry represented that the allowance made for depreciation and replacement in working out the cost of manufacture of sugar (for purpose of the formula) was inadequate and did not take into account fully the current cost of machinery and spare parts. A committee was appointed by the Government, *vide* Ministry of Food and Agriculture Resolution No. SV-101(5-1)/54 dated the 2nd April 1955, under the Chairmanship of Shri P. A. Gopalakrishnan to examine the formula adopted for 1953-54 season and suggest modifications, with a view to its application in future years. The Committee considered the formula as sound in principle and recommended its application, with certain modifications, on a compulsory basis. The formula recommended by the Committee was accepted by the Government for adoption on a compulsory basis with effect from 1958-59 season on an all-India basis, unless any alternative scheme was applied in a State or region in consultation with the State Government or Governments concerned.

2. The basic principle of the formula is that the growers supplying cane to a sugar factory, share with the factory owner the net sugar price realized by the latter during the year in the same ratio as the cost of cane bears to the factory's cost of production of sugar during that year, excluding taxes. For the purpose of the formula, the cost of production was to be determined on the basis of what was generally known as the amended Naidu Schedule. Since the amended Naidu Schedule did not provide for expenses on certain items, allowance had to be made in the price linking formula for items such as driage, selling commission on sugar, extra cost on transport of cane, bonus to labour, labour awards etc. The amended Naidu Schedule allowed to the industry profit at the rate of Re. 0-10-4 per maund of sugar and an allowance of Re. 0-8-4 per maund of sugar for rehabilitation.

3. The Tariff Commission, which examined in 1958-59, the cost structure of sugar and fair price payable to the sugar industry, prepared four regional schedules for determining the price of sugar. The Commission has made provision for driage, selling expenses (as distinct from selling commission), extra cost on transport of cane etc. The Commission has also allowed a fair return of 12 per cent to the industry with a view to provide sufficient funds for each unit to meet its commitments under bonus, gratuity, interest on borrowed capital and debentures, dividend on preference shares, managing agents' commission and income-tax and finally leave a residue to a large majority of the units in all regions to declare reasonable dividends. The Commission has not recommended the grant of any

rehabilitation allowance for fixation of ex-factory price. The Government of India have accepted the recommendations of the Commission and have decided to make use of the cost schedules prepared by the Commission to fix the control prices of sugar where necessary. The question of making suitable adjustments in the price linking formula in the light of the Commission's report and the cost schedules prepared by them has now arisen.

4. The sugar industry has claimed that rehabilitation allowance should be allowed as in the past before the sugar price is made shareable with the growers according to the price linking formula. In support of their request, the industry has quoted a judgement of the Supreme Court of India given in May 1959 in the dispute between the Associated Cement Co. Ltd., and their workmen. The industry has also contended that there should be no question of sharing the sugar price with the growers in the regions where control on ex-factory prices of sugar operates. The control prices are related to the minimum price of cane and the industry, as a whole, in these regions does not earn any extra price. The industry has, however, no objection to sharing with the growers any extra advantage out of special incentives given by the Government, but some simple formula for this should be evolved.

On behalf of the growers, it is contended that the existing formula is not only complicated, but also unfavourable to the growers.

5. In view of the difficulties indicated in paragraph 3 and the representations received from the industry and on behalf of the cane-growers, the Government of India consider that a fresh examination of the matter has become necessary. The Tariff Commission is accordingly requested under Section 12(d) of the Tariff Commission Act, 1951 to—

(i) examine the matter in all its aspects and suggest modifications in the existing formula with a view to improving it or to suggest a revised all-India formula or regional formulae in the light of the cost schedules given by the Commission in its report on cost structure of sugar and fair price payable to the industry, keeping in view the need for making the formula simple, easy of application and intelligible to the cane-growers;

(ii) examine whether the claim of the industry for a rehabilitation allowance in the matter of division of sugar price between the cane-grower and the industry is justified and, if so, the rate at which the allowance should be allowed in the price linking formula(e);

(iii) examine whether the formula(e) should be made applicable to regions where ex-factory prices have been fixed, and in case the formula is not applied, how the advantage of special incentives given to factories in years of control should be shared between the industry and the growers;

(iv) examine the effect of the price linking formula(e) on the establishment of new factories with heavy capital outlay and whether any concession should be allowed to them in the matter of application of the formula(e).

The Commission is requested to submit its report to the Government as early as possible.

Firms or persons interested in the matter, who desire that their views should be considered, should address their representations to the Secretary, Tariff Commission, C. G. O. Building, 101, Queen's Road, Bombay-1.

APPENDIX II

(*Vide* paragraph 3.2)

A list of parties to whom the Commission's questionnaires/letters were sent and from whom replies were received

*Indicates those who have replied.

A. PRODUCERS: (Sugar Mills)

West Uttar Pradesh

*1. Shri Janki Sugar Mills Co., Doiwala, Distt. Dehradun.

*2. Dhampur Sugar Mills Ltd., Dhampur, Distt. Bijnor.

*3. Modi Sugar Mills Ltd., Modinagar, Distt. Meerut.

4. Ganga Sugar Corporation Ltd., Deoband, Distt. Saharanpur.

5. Shiv Prasad Banarsidas Sugar Mills, Bijnor, Distt. Bijnor.

6. Panniji Sugar & General Mills Co., Panninagar (Bulandshahr).

7. Upper India Sugar Mills Ltd., Khatuali, Distt. Muzaffarnagar.

*8. Ram Luxman Sugar Mills, Mohiuddinpur, Distt. Meerut.

*9. Upper Doab Sugar Mills Ltd., Shamli, Distt. Muzaffarnagar.

10. Jaswant Sugar Mills Ltd., Meerut City, Distt. Meerut.

*11. Sir Shadilal Sugar & General Mills Ltd., Mansurpur, Distt. Muzaffarnagar.

*12. Upper Ganges Sugar Mills Ltd., Seohara, Distt. Bijnor.

13. Kundan Sugar Mills, Amroha, Distt. Moradabad.

14. Raza Buland Sugar Co. Ltd., Rampur (Raza factory).

*15. Daurala Sugar Works, Daurala, Distt. Meerut.

*16. Diwan Sugar & General Mills Ltd., Diwan Nagar, P. O. Sakhoti-tanda, Distt. Meerut.

*17. Raza Buland Sugar Co. Ltd., Rampur (Buland Factory).

*18. Simbhaoli Sugar Mills Ltd., Simbhaoli, Distt. Meerut.

*19. Neoli Sugar Factory, Manpur-Nagaria, P. O. Neoli (Etah).

*20. L. H. Sugar Factories & Oil Mills Ltd., Kashipur, Distt. Nainital.

*21. Rai Bahadur Narain Singh Sugar Mills Ltd., Lhaksar (Distt. Saharanpur).

22. Amritsar Sugar Mills Co. Ltd., Rohanakalan (Muzaffarnagar).

*23. Lord Krishna Sugar Mills Ltd., Saharanpur, Distt. Saharanpur.

*24. Ajudhia Sugar Mills, Raja-ka-Sahaspur, Distt. Moradabad.

25. Mawana Sugar Works, Mawana, Distt. Meerut.

*26. Gobind Sugar Mills Ltd., P. O. Aira Estate, Distt. Kheri-Lakhimpur.

*27. Oudh Sugar Mills Ltd., Hargaon, Distt. Sitapur.

*28. Lakshmiji Sugar Mills Co. Ltd., Maholi, Distt. Sitapur.

*29. H. R. Sugar Factory Ltd., Nekpur, Bareilly.

*30. Hindustan Sugar Mills Ltd., Golagokarannath, Distt. Kheri.

*31. Kesar Sugar Works, Baheri, Distt. Bareilly.

*32. L. H. Sugar Factory & Oil Mills Ltd., Pilibhit.

*33. Lakshmiji Sugar & Oil Mills Ltd., Hardoi, Distt. Hardoi.

*34. Rosa Sugar Works & Distillery, Rosa, Distt. Shahjahanpur.

35. Mahalaxmi Sugar Mills Co. Ltd., Iqbalpur, P. O. Rorkee, Distt. Saharanpur.

*36. The Bazpur Co-operative Sugar Factory Ltd., Bazpur, Naini-Tal.

East Uttar Pradesh

*1. Nawabaganj Sugar Mills Co. Ltd., Nawabganj, Distt. Gonda.

*2. Seksaria Biswan Sugar Factory Ltd., Biswan, Distt. Sitapur.

*3. Balrampur Sugar Co. Ltd., Balrampur, Distt. Gonda.

*4. Balrampur Sugar Co. Ltd., Tulsipur, Distt. Gonda.

5. Seksaria Sugar Mills Ltd., Babhnan, Distt. Gonda.

6. R. B. Lachmandas Sugar & General Mills Ltd., P. O. Jarwal Road, Distt. Bahriach.

7. Vishnu Pratap Sugar Works, Khadda, Distt. Deoria.

*8. Cawnpore Sugar Works Ltd., P. O. Gauribazar, Distt. Deoria.

*9. Cawnpore Sugar Works Ltd., Kathkuiyan Factory Branch, P. O. Kathkuiyan, Distt. Deoria.

*10. Basti Sugar Mills Co. Ltd., Walterganj, Distt. Basti.

*11. Punjab Sugar Mills Co. Ltd., Ghaughli, Distt. Gorakhpur.

*12. Ishwari Khetan Sugar Mills Ltd., Lakshmiganj, Distt. Deoria.

*13. Ratna Sugar Mills Co. Ltd., Shahganj, Distt. Jaunpur.

*14. Shree Anand Sugar Mills Ltd., Khalilabad, Distt. Basti.

15. Shankar Sugar Mills Ltd., Captainganj, Distt. Deoria.

*16. Cawnpore Sugar Works Ltd., Padrauna Factory Branch, P. O. Padrauna, Distt. Deoria.

*17. Basti Sugar Mills Co. Ltd., Basti, Distt. Basti.

*18. Shree Sitaram Sugar Co. Ltd., P. O. Baitalpur, Distt. Deoria.

*19. Madho Mahesh Sugar Mills Ltd., Munderwa, Distt. Basti.

*20. Ramkola Sugar Mills Co. Ltd., Ramkola, Distt. Deoria.

*21. Mahabir Sugar Mills Ltd., Siswabazar, Distt. Gorakhpur.

*22. Deoria Sugar Mills Ltd., Deoria, Distt. Deoria.

*23. United Provinces Sugar Co. Ltd., P. O. Seorahi, Distt. Deoria.

*24. Saraya Sugar Factory, Sardarnagar, Distt. Gorakhpur.

*25. Burhwal Sugar Mills Co. Ltd., Burhwal Distt. Barabanki.

*26. Diamond Sugar Mills Ltd., Pipraich, Distt. Deoria.

*27. Lakshmi Devi Sugar Mills Ltd., Chitauni, Distt. Deoria.

28. Purtabpur Co. Ltd., Mairwa, Distt. Deoria.

*29. Maheshwari Khetan Sugar Mills Ltd., Ramkola, Distt. Deoria.

*30. Ganesh Sugar Mills Ltd., P. O. Anandnagar, Distt. Gorakhpur.

*31. Kamlapat Motilal Sugar Mills, P. O. Motinagar, Distt. Fyzabad.

*32. Seth Ramchand & Sons Sugar Mills, Barabanki.

*33. Motilal Padampat Sugar Mills Co. Ltd., Bhatni, Distt. Deoria.

34. Shri Krishna Desi Sugar Works, Jhusi, Allahabad.

35. Deoria Baitalpur Sindhi Sugar Mills Ltd., Deoria.

36. Shree Sardar Sugar Mills Co., Nichloul, Gorakhpur.

South Bihar

*1. Rohtas Industries, P. O. Dalmianagar, Distt. Shahabad.

*2. South Bihar Sugar Mills Ltd., Bihta, Distt. Patna.

*3. Mohini Sugar Mills Ltd., P. O. Warisaliganj, Distt. Gaya.

4. Gaya Sugar Mills Ltd., Guraru, Distt. Gaya.

5. Ganga Deshi Sugar Factory Ltd., Buxar, Shahabad.

North Bihar

*1. Harinagar Sugar Mills Ltd., P. O. Harinagar (Champaran).

*2. North Bihar Sugar Mills Ltd., Bagaha, P. O. Naraipur, Distt. Champaran.

*3. Bharat Sugar Mills Ltd., Sidhwalia, Distt. Saran.

*4. Lohat Sugar Works, P. O. Lohat, Distt. Champaran.

*5. Shree Hanuman Sugar Mills Ltd., Motihari, Distt. Darbhanga.

*6. Sakri Sugar Works, P. O. Sakri, Distt. Darbhanga.

7. Vishnu Sugar Mills Ltd., Gopalganj, P. O., Vishnu Sugar Mills, Distt. Saran.

*8. Belsund Sugar Co. Ltd., P. O. Righa, Distt. Muzaffarpur.

*9. New Savan Sugar & Gur Refining Co. Ltd., Siwan, Distt. Saran.

*10. Motilal Padampat Sugar Mills Co. Ltd., Majhaulia, Distt. Champaran.

*11. S. K. G. Sugar Ltd., P. O. Lauriya, Distt. Champaran.

*12. Sitalpore Sugar Works Ltd., Garaul, Distt. Muzaffarpur.

*13. Champaran Sugar Co. Ltd., Chanpatia, Distt. Champaran.

*14. Ryam Sugar Co. Ltd., Ryam, Distt. Darbhanga.

*15. S. K. G. Sugar Ltd., Hathua, P. O. Mirganj, Distt.

*16. New India Sugar Mills Ltd., Hassanpur Road, P. O. Hassanpur Sugar Mills, Distt. Darbhanga.

*17. Cawnpore Sugar Works Ltd., Marhowrah, Distt. Saran.

*18. Bihar Sugar Works of the Industrial Corp. Ltd., Pachrukhi, Distt. Saran.

19. Samastipur Central Sugar Co. Ltd., Samastipur, Distt. Darbhanga.

*20. Sasamusa Sugar Works Ltd., P. O. Sasamusa, Distt. Saran.

21. Sugauli Sugar Works Ltd., Sugauli, Distt. Champaran.

*22. New Swadeshi Sugar Mills Ltd., Narkatiaganj, Distt. Champaran.

*23. Champaran Sugar Co. Ltd., Barah-Chakia, Distt. Champaran.

*24. Motipur Sugar Factory Ltd., Motipur, Distt. Muzaffarpur.

25. Indian Sugar Works, Siwan, Saran.

Maharashtra

1. Godavari Sugar Mills Ltd., Lakshmiwadi, *Via* Kopergaon, Distt. Ahmednagar.

*2. Ravalgaon Sugar Farm Ltd., Ravalgaon, Distt. Nasik.

*3. Saswad Mali Sugar Mills Ltd., P. O. Malinagar, Distt. Sholapur.

4. Maharashtra Sugar Mills Ltd., P. O. Tilaknagar, Shrirampur, Distt. Ahmednagar.

*5. Belapur Co. Ltd., Harigaon, Distt. Ahmednagar.

*6. Kolhapur Sugar Mills, Kasaba Bavada, Kolhapur, Distt. Kolhapur.

7. Belvandi Sugar Farm Ltd., P. O. Belvandi, Distt. Ahmednagar.

8. Godavari Sugar Mills Ltd., Kakarwadi, Distt. Ahmednagar.

*9. Walchandnagar Industries Ltd., P. O. Walchandnagar, Distt. Poona.

*10. Phaltan Sugar Works Ltd., Sakharwadi, Distt. North Satara.

*11. Brihan Maharashtra Sugar Syndicate Ltd., P. O. Shreepur, Distt. Sholapur.

*12. Shree Changdeo Sugar Mills Ltd., P. O. Changdeonagar, Distt. Ahmednagar.

*13. Pravara Sahakari Sakhar Karkhana Ltd., Pravaranagar, Distt. Ahmednagar.

*14. Kopergaon Sahakari Sakhar Karkhara Ltd., P. O. Kopergaon, Distt. Ahmednagar.

*15. Chhatrapati Shivaji Sahakari Sakhar Karkhana Ltd., Sansar, Distt. Poona.

*16. Rahuri Sahakari Sakhar Karkhana Ltd., Rahuri, Distt. Ahmednagar.

*17. Rahata Sahakari Sakhar Karkhana Ltd., Rahata, Distt. Ahmednagar.

*18. Shriram Sahakari Sakhar Karkhana Ltd., Phaltan, Distt. North Satara.

19. Malegaon Sahakari Sakhar Karkhana Ltd., Baramati, Distt. Poona.

20. Ashok Sahakari Sakhar Karkhana Ltd., Nipani, Shrirampur, Distt. Ahmednagar.

21. The Somaiya Sugar Factory, Lakshmiwadi *Via* Kopeargaon, Ahmednagar.

*22. Shri Panchganga Sahakari Sakhar Karkhana Ltd., Ichalkaranji, Distt. Kolhapur.

23. Gangapur Sugar Mills Ltd., Raghunathnagar, Distt. Aurangabad.

24. Shree Warana Sahakari Sakhar Karkhana Ltd., Kodoli, Distt. Kolhapur.

*25. The Bhogawati Sahakari Sakhar Karkhana Ltd., Parite, Distt. Kolhapur.

*26. Shetkari Sahakari Sakhar Karkhana Ltd., Sangli, South Satara Distt.

*27. The Girna Sahakari Sakhar Karkhana Ltd., Nasik.

Rajasthan

1. Mewar Sugar Mills Ltd., Bhupalsagar, Distt. Udaipur.

*2. The Ganganagar Sugar Mills Ltd., Sri Ganganagar.

3. Shree Bijaya Sugar Mills Ltd., Bijainagar, Distt. Ajmer.

Andhra Pradesh

*1. Sri Rama Sugar & Industries Ltd., Bobbili, Distt. Srikakulam.

*2. K. C. P. Ltd., Vuyyuru, Distt. Kistna.

3. Vizagapatam Sugars & Refinery Ltd., Ahakapalle, Distt. East Godavari.

*4. Kirlampudi Sugar Mills Ltd., Pithapuram, Distt. East Godavar.

*5. Sri Rama Sugars & Industries Ltd., Seethan Agram, Distt. Srikakulam.

*6. Deccan Sugar & Abkari Co. Ltd., Samalkot, Distt. East Godavari.

*7. Andhra Sugars Ltd., Tanuku, Distt. West Godavari.

*8. Etikoppaka Co-operative Agricultural & Industrial Society Ltd., Darlapudi, Yellamanchilli, Distt. Vizagapatam.

9. Nizam Sugar Factory Ltd., Post Box No. 117, Distt. Hyderabad.

10. Challapalli Sugar Ltd., P. O. Lakshmipuram, Distt. Krishna.

*11. V. V. S. Sugars, Chagallu, Distt. Godavari.

12. The Anakapalle Co-operative Agricultural & Industrial Society Ltd., Anakapalle, Vizagapatam.

*13. Shri Sarvaraya Sugars Ltd., Ramchandrapuram, East Godavari.

Madras

*1. East India Distilleries & Sugar Factories Ltd., Nellikkuppam, Distt. South Arcot.

*2. Deccan Sugar & Abkari Co., Ltd., Pugalur, Distt. Trichinopoly.

*3. Madura Sugars & Allied Products Ltd., Pandiarajapuram, Distt. Madurai.

*4. Thiru Arooran Sugar Ltd., P. O. Vadapathimangalam, Distt. Tanjore.

*5. Cauvery Sugars & Chemicals Ltd., Pettaivaytalai, Distt. Trichinopoly.

*6. The New Horizon Sugar Mills Ltd., Post Box No. 29, Pondicherry.

Mysore

*1. Mysore Sugar Co. Ltd., Mandya, Distt. Mandya.

*2. India Sugar & Refineries Ltd., Hospet, Distt. Bellary.

*3. Salarjung Sugar Mills Ltd., Munirabad, Distt. Raichur.

*4. Ugar Sugar Works Ltd., Ugar Khurd, Distt. Belgaum.

*5. The Bellary Central Co-operative Stores Sugar Factory, Kampli, Distt. Bellary.

*6. The Tunga Bhandra Sugar Works Ltd., Shimoga, Distt. Shimoga.

7. Krishna Sugar Mills Ltd., Krishna Kittur, Belgaum *Via* Kudchi.

8. Sri Lakshmi Narayan Sugar Works Ltd., Harpalpur, Alipura.

9. Shree Vikram Sugar Mills Ltd., Alote, Dewas Senior.

Punjab

*1. Saraswati Sugar Mills, P. O. Yamumanagar, Distt. Ambala.

*2. Jagat jit Sugar Mills Co. Ltd., Phagwara, Distt. Kapurthala.

*3. Malwa Sugar Mills Co. Ltd., Dhuri, Distt. Sangrur.

4. Janta Co-operative Sugar Mills Ltd., Bhogpur, Distt. Jullundur.

*5. Haryana Co-operative Sugar Mills Ltd., Rohtak.

6. Panipat Co-operative Sugar Mills Ltd., P. O. Panipat, Distt. Karnal.

7. Hamira Sugar Mills, Jagatjitnagar, Kapurthala.

Madhya Pradesh

*1. Jaora Sugar Mills, Jaora, Distt. Ratlam.

*2. Gwalior Sugar Co. Ltd., Distt. Dabra.

3. Seth Govindram Sugar Mills, P. O. Mehidupur Road.

*4. Jiwaji Rao Sugar Co. Ltd., Dalauda, Distt. Mandsaur.

*5. Bhopal Sugar Industries Ltd., Sehore, Distt. Bhopal.

Orissa

* Jeypore Sugar Co. Ltd., Rayagada, Distt. Koraput.

West Bengal

*1. Ramnuggar Cane & Sugar Co. Ltd., Plassey, Distt. Nadia.

2. Shree Radha Krishna Sugar Mills Ltd., Beldanga, Murshidabad.

3. The National Sugar Mills Ltd., Ahmedpur, Birbhum.

Kerala

*The Travancore Sugar & Chemicals Ltd., Tiruvalla, Distt. Quilon.

Assam

*The Assam Co-operative Sugar Mills Ltd., Barua Ramunagaon, Sibsagar.

Gujarat

1. Shri Khedut Sahakari Khand Udyog Mandli Ltd., Baber, Bardoli, Distt. Surat.
2. Bhavnagar Sugar Mills Ltd., Dhola Jn., Distt. Bhavnagar.
3. The Kodinar Khand Udyog Khedut Sahakari Mandali Ltd., Kodinar, Amreli Distt.

B. SUGAR MILLS' ASSOCIATIONS:

*1. Indian Sugar Mills' Association, India Exchange, Calcutta.

*2. Secretary, The South Indian Sugar Mills' Association, No. 1, North Beach Road, Madras.

*3. Secretary, The Deccan Sugar Factories Association, Industrial Assurance Building, Opposite Church Gate Station, Fort, Bombay.

*4. Secretary, The Bihar Sugar Mill's Association, Post Box 3, Patna.

5. Secretary, The Bengal Sugar Mill's Association, 8, Dalhousie Square, Calcutta.

6. Secretary, The Indian Sugar Producers' Association, C/o M/s. Begg Sutherland & Co., Ltd., Sutherland House, Kanpur.

*7. Secretary, Madhya Pradesh Sugar Mills' Association, 46, Jail Road, Indore City.

*8. Secretary, Eastern Group of Sugar Factories, U. P., C/o The Indian Sugar Mills' Association (East U. P. Branch) Golghar, Gorakhpur.

9. Secretary, Indian Sugar Mills' Association (Punjab Branch), Plot 268/ Sector 8C, Chandigarh.

*10. Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., D. L. B. Building (Extension), Poona-2.

C. CANE GROWERS' UNIONS/ASSOCIATIONS/SOCIETIES ETC.:

* All India Cane Growers' Federation, 5, Jhandewalan Estate, Rani Jhansi Road, New Delhi.

Uttar Pradesh

1. The U. P. Co-operative Cane Unions Federation, 12-Rana Pratap Marg, Lucknow.
2. Shri Sibbanlal Saksena, M. P. President, Ganna Utpadak Sangh Mian Bazar, Gorakhpur.
3. The Farmers' Union, Kashipur.
4. Co-op. Cane Dev. Union Ltd., Bulandshahr, Bulandshahr.
5. Co-operative Cane Development Union Ltd., Simbhaoli, Meerut.
6. Co-op. Cane Dev. Union Ltd., Begamabad, Meerut.
7. Co-op. Cane Dev. Union Ltd., Mohiuddinpur, Meerut.
8. Co-op. Cane Dev. Union Ltd., Meerut, Meerut.
9. Co-op. Cane Dev. Union Ltd., Daurala, Meerut.

10. Co-op. Cane Dev. Union Ltd., Maliana, Meerut.
11. Co-op. Cane Dev. Union Ltd., Mowana, Meerut.
12. Co-op. Cane Dev. Union Ltd., Sakoti-Tanda, Meerut.
13. Co-op. Cane Dev. Union Ltd., Hapur, Meerut.
14. Co-op. Cane Dev. Union Ltd., Khatauli, Muzaffarnagar.
15. Co-op. Cane Dev. Union Ltd., Mansoorpur, Muzaffarnagar.
16. Co-op. Cane Dev. Union Ltd., Rohana Kalan, Muzaffarnagar.
17. Co-op. Cane Dev. Union Ltd., Muzaffarnagar, Muzaffarnagar.
18. Co-op. Cane Dev. Union Ltd., Shamli, Muzaffarnagar.
19. Co-op. Cane Dev. Union Ltd., Ram Raj, Muzaffarnagar.
20. Co-op. Cane Dev. Union Ltd., Deoband, Saharanpur.
21. Co-op. Cane Dev. Union Ltd., Saharanpur, Saharanpur.
22. Co-op. Cane Dev. Union Ltd., Iqbalpur, Saharanpur.
23. Co-op. Cane Dev. Union Ltd., Lhaksar, Saharanpur.
24. Co-op. Cane Dev. Union Ltd., Sarsawa, Saharanpur.
25. Co-op. Cane Dev. Union Ltd., Doiwala, Dehradun.
26. Co-op. Cane Dev. Union Ltd., Dehradun, Dehradun.
27. Co-op. Cane Dev. Union Ltd., Seohara, Bijnor.
*28. Co-op. Cane Dev. Union Ltd., Dhampur, Bijnor.
29. Co-op. Cane Dev. Union Ltd., Bijnor, Bijnor.
30. Co-op. Cane Dev. Union Ltd., Nagina, Bijnor.
31. Co-op. Cane Dev. Union Ltd., Chandpur, Bijnor.
32. Co-op. Cane Dev. Union Ltd., Bilari, Moradabad.
33. Co-op. Cane Dev. Union Ltd., Moradabad, Moradabad.
34. Co-op. Cane Dev. Union Ltd., Amroha, Moradabad.
35. Co-op. Cane Dev. Union Ltd., Rampur, Rampur.
36. Co-op. Cane Dev. Union Ltd., Milak, Rampur.
37. Co-op. Cane Dev. Union Ltd., Bareilly, Bareilly.
38. Co-op. Cane Dev. Union Ltd., Baheri, Bareilly.
39. Co-op. Cane Dev. Union Ltd., Bhojeepura, Bareilly.
40. Co-op. Cane Dev. Union Ltd., Pilibhit, Pilibhit.
41. Co-op. Cane Dev. Union Ltd., Puranpur, Pilibhit.
42. Co-op. Cane Dev. Union Ltd., Bisalpur, Pilibhit.
43. Co-op. Cane Dev. Union Ltd., Badaun, Badaun.
44. Co-op. Cane Dev. Union Ltd., Neoli, Etah.
45. Co-op. Cane Dev. Union Ltd., Haldwani, Nainital.
46. Co-op. Cane Dev. Union Ltd., Kashipur, Nainital.

47. Co-op. Cane Dev. Union Ltd., Bazpur, Nainital.
48. Co-op. Cane Dev. Union Ltd., Phoolbagh, Nainital.
49. Co-op. Cane Dev. Union Ltd., Rosa, Shahjahanpur.
50. Co-op. Cane Dev. Union Ltd., Shahjahanpur, Shahjahanpur.
51. Co-op. Cane Dev. Union Ltd., Hardoi (Gate), Hardoi.
52. Co-op. Cane Dev. Union Ltd., Hardoi (Growers), Hardoi.
53. Co-op. Cane Dev. Union Ltd., Aishbagh, Lucknow.
*54. Co-op. Cane Dev. Union Ltd., Juggaur, Lucknow.
55. Co-op. Cane Dev. Union Ltd., Baragaon, Barabanki.
56. Co-op. Cane Dev. Union Ltd., Barabanki, Barabanki.
57. Co-op. Cane Dev. Union Ltd., Burhwal, Barabanki.
58. Co-op. Cane Dev. Union Ltd., Daryabad, Barabanki.
59. Co-op. Cane Dev. Union Ltd., Gutaiya, Kanpur.
60. Co-op. Cane Dev. Union Ltd., Golagokaran Nath, Kheri.
61. Co-op. Cane Dev. Union Ltd., Phardhan, Kheri.
62. Co-op. Cane Dev. Union Ltd., Aira, Kheri.
63. Co-op. Cane Dev. Union Ltd., Jangbahadurganj, Kheri.
64. Co-op. Cane Dev. Union Ltd., Lakhimpur Kheri, Kheri.
65. Co-op. Cane Dev. Union Ltd., Arnikhana, Kheri.
66. Co-op. Cane Dev. Uhion Ltd., Paliabhira, Kheri.
67. Co-op. Cane Dev. Union Ltd., Hargaon, Sitapur.
68. Co-op. Cane Dev. Union Ltd., Maholi, Sitapur.
69. Co-op. Cane Dev. Union Ltd., Biswan, Sitapur.
70. Co-op. Cane Dev. Union Ltd., Sitapur, Sitapur.
71. Co-op. Cane Dev. Union Ltd., Faizabad, Faizabad.
72. Co-op. Cane Dev. Union Ltd., Masodha, Faizabad.
73. Co-op. Cane Dev. Union Ltd., Shahganj, Jaunpur.
74. Co-op. Cane Dev. Union Ltd., Mehrawa, Jaunpur.
75. Co-op. Cane Dev. Union Ltd., Nawabganj, Gonda.
76. Co-op. Cane Dev. Union Ltd., Gonda, Gonda.
77. Co-op. Cane Dev. Union Ltd., Balrampur, Gonda.
78. Co-op. Cane Dev. Union Ltd., Tulsipur, Gonda.
79. Co-op. Cane Dev. Union Ltd., Mankapur, Gonda.
80. Co-op. Cane Dev. Union Ltd., Jarwal Road, Bahraich.
*81. Co-op. Cane Dev. Union Ltd., Babhnan, Basti.
82. Co-op. Cane Dev. Union Ltd., Khalilabad, Basti.
83. Co-op. Cane Dev. Union Ltd., Munderwa, Basti.

84. Co-op. Cane Dev. Union Ltd., Masti, Basti.
85. Co-op. Cane Dev. Union Ltd., Walterganj, Basti.
86. Co-op. Cane Dev. Union Ltd., Tinich, Basti.
87. Co-op. Cane Dev. Union Ltd., Gaur, Basti.
88. Co-op. Cane Dev. Union Ltd., Barhn, Basti.
89. Co-op. Cane Dev. Union Ltd., Pipraich, Gorakhpur.
90. Co-op. Cane Dev. Union Ltd., Ghughli, Gorakhpur.
91. Co-op. Cane Dev. Union Ltd., Siswa Bazar, Gorakhpur.
92. Co-op. Cane Dev. Union Ltd., Sahjanwa, Gorakhpur.
93. Co-op. Cane Dev. Union Ltd., Sardarnagar, Gorakhpur.
94. Co-op. Cane Dev. Union Ltd., Mani Ram, Gorakhpur.
95. Co-op. Cane Dev. Union Ltd., Capiarganj, Gorakhpur.
96. Co-op. Cane Dev. Union Ltd., Pharenda, Gorakhpur.
97. Co-op. Cane Dev. Union Ltd., Bridgemanganj, Gorakhpur.
98. Co-op. Cane Dev. Union Ltd., Kuraghat, Gorakhpur.
99. Co-op. Cane Dev. Union Ltd., Laxmiganj, Deoria. (N).
100. Co-op. Cane Dev. Union Ltd., Ramkola (P), Deoria (N).
101. Co-op. Cane Dev. Union Ltd., Ramkola (K), Deoria (N).
*102. Co-op. Cane Dev. Union Ltd., Padrauna, Deoria (N).
103. Co-op. Cane Dev. Union Ltd., Kathkuiyan, Deoria (N).
104. Co-op. Cane Dev. Union Ltd., Dudhai, Deoria (N).
105. Co-op. Cane Dev. Union Ltd., Bodarwar, Deoria (N).
106. Co-op. Cane Dev. Union Ltd., Chhitauni, Deoria (N).
107. Co-op. Cane Dev. Union Ltd., Khadda, Deoria (N).
108. Co-op. Cane Dev. Union Ltd., Captainganj, Deoria (N).
109. Co-op. Cane Dev. Union Ltd., Seorahi (Tamkohi Road), Deoria (N).
110. Co-op. Cane Dev. Union Ltd., Taraiyasujan, Deoria (N).
111. Co-op. Cane Dev. Union Ltd., Kasia, Deoria (N).
112. Co-op. Cane Dev. Union Ltd., Deoria (P), Deoria (N).
113. Co-op. Cane Dev. Union Ltd., Baitalpur, Deoria (N).
114. Co-op. Cane Dev. Union Ltd., Noonkhar, Deoria (N).
*115. Co-op. Cane Dev. Union Ltd., Bhatni, Deoria (N).
116. Co-op. Cane Dev. Union Ltd., Bhatpar Rani, Deoria (N).
*117. Co-op. Cane Dev. Union Ltd., Saleempur, Deoria (N).
118. Co-op. Cane Dev. Union Ltd., Lar Road, Deoria (N).
119. Co-op. Cane Dev. Union Ltd., Barhaj, Deoria (N).
120. Co-op. Cane Dev. Union Ltd., Satraon, Deoria (N).

121. Co-op. Cane Dev. Union Ltd., Hata, Deoria (N).

122. Co-op. Cane Dev. Union Ltd., Pratabpur, Deoria (N).

123. Co-op. Cane Dev. Union Ltd., Gauribazar, Deoria (N).

124. Co-op. Cane Dev. Union Ltd., Sakaldiha, Varanasi.

125. Co-op. Cane Dev. Union Ltd., Varanasi, Varanasi.

126. Co-op. Cane Dev. Union Ltd., Azamgarh, Azamgarh.

*127. Co-op. Cane Dev. Union Ltd., Belthra Road, Ballia.

Bihar

*1. Bihar State Cane Growers Co-operative AssociationL imited, Patna.

2. Shri Nand Kishore Narain, President, Bihar State Cane Growers' Association, Village—Doomer Narendra, P. O. Bhorey, District Saran.

*3. Shri Bhubneshwar Prasad Rai, Village Bilapur, P. O. Ramnagar, District Champaran.

*4. Shri Bipin Bihari Sinha, M. L. A., Village & P. O. Tilouthu, District Shahabad.

5. Shri Mathura Prasad Singh, M. L. C., At & P. O. Newada, District Gaya.

Punjab

*1. Yamunanagar Canegrowers Co-operative Society Ltd., Yamunanagar, District Ambala.

2. Shanzadpur Canegrowers Co-operative Society Ltd., Shahzadpur, P. O. Buria, Teh. Jagadhri, Ambala.

3. Naharpur Canegrowers Co-operative Society Ltd., Naharpur, Teh. Jagadhri, District Ambala.

*4. Chhachhrauli Canegrowers Co-operative Society Ltd., Chhachhrauli, Teh. Jagadhri, Ambala.

5. Radaur Conegrowers Co-operative Society Ltd., Radaur, Teh. Thanesa, District Karnal.

*6. Mustafabad Canegrowers Co-operative Society Ltd., Mustafabad, Teh. Jagadhri, Ambala.

*7. Ambala Canegrowers Co-operative Society Ltd., Kesri, Teh. and Distt. Ambala.

8. Indri Canegrowers Co-operative Society Ltd., Indri, Teh. and District Karnal.

9. Phagwara Sugarcane Co-operative Society Ltd., Phagwara, District Kapurthala.

10. Jullundur Sugarcane Co-operative Society Ltd., Allawalpur, Teh. and Distt. Jullundur.

11. Nawanshahr Canegrowers Co-operative Society Ltd., Nawanshahr, Teh. Nawanshahr (Jullundur).

12. Phillaur Canegrowers Co-operative Society Ltd., Phillaur (Jullundur).

5—3 T. C. Bom/62

13. Garhshankar Canegrowers Co-operative Society Ltd., Kot Fatuhi, District Hoshiarpur.

*14. Zimindara Sugarcane Co-operative Society Ltd., Dhuri, District Sangrur.

15. The Amargarh Canegrowers Co-operative Society Ltd., Amargarh, District Sangrur.

16. K. L. Khanna, Radhaswamy Colony, P. O. Beas, East Punjab.

Andhra Pradesh

*1. Andhra Sugarcane Growers Association, Himayatnagar, Hyderabad.

*2. The President, Sugarcane Growers Association, Bodhan (Hyderabad).

*3. Deccan Plantations Ltd., 317, Narsi Natha Street, Bombay-9. (Farm in Andhra Pradesh).

4. Shri C. Kesaviah Naidu, B-Varam, Narasingapuram Post, Chittoor Dt.

*5. Shri P. Venkatakrishnayya Naidu, Member, T. T. O. Committee, Chitoor Distt.

6. Shir P. Rajagopal Naidu, M.L.S., Chittoor Distt.

7. Shri K. Kuppi Reddy, President, Punchayat Samithi, Chittoor Distt.

Madras

*1. The President, South Indian Sugarcane Growers' Association, 12, Avenue Road, Nungambakkam, Madras-6.

*2. Pugalur, Sugarcane Growers' Co-operative Society, No. 660, Pugalur, Trichi District.

3. South Arcot Sugarcane Growers' Association, Nellikuppam, South Arcot District.

4. Sugarcane Growers' Association, Nanjapugalur, Tiruchirapalli District.

*5. Cauvery Sugars and Chemicals Ltd., Sugarcane Growers' Association, Pettavaithalai, Tiruchirapalli District.

*6. The E. I. D. and S. F. Ltd., Sugarcane Suppliers' Association, Nellikuppam, South Arcot District.

*7. K. Sundararajan, B. Sc. (Hons.), Kulittalai, Madras.

*8. Madura Sugars and Allied Products Ltd., Cane Growers' Association *Via* Amayankanur, Pallappatti.

*9. Karur Taluk Amaravathy Ayacut Karumbu Payiriduvor Sangam, Karur, Tiruchirapalli District.

10. Namkkal Taluk Sugarcane Growers' Co-operative Society Ltd., Pallapatty, Salem District.

11. Pallapatty Sugarcane Growers' Co-operative Society Ltd., Pallapatty (*Via*) Ammayanaickanur, Madurai District.

12. K. S. Krishnamurthi, 742, Sita Ram Chetty St., Amburpet, Vaniyambadi (N.A.).

13. Shri M. S. Ganesh, B.Sc., Pilikalpalayam P. O. (*Via*) Kodumudi.

14. Shri Janakiram Naidu, Mirasdar, Vangal P. O. (*Via*) Karur, S. Railway, Tiruchi Distt.

15. Shri R. Rajaram Naidu, Mirasdar, Vangal P. O. (*Via*) Karur S. M., Tiruch, Distt.

*16. Shri R. D. Reddy, Pallelkuppam, N. Arcot Distt.

17. Shri S. N. Manickavachagam, Village Munsif, Somur Village, Sommur Post, Tiruchirapalli Distt.

18. Shri R. Rengaraj, Mirasdar, Vangal P. O. (*Via*) Karur S. M., Tiruchi Distt.

19. K. K. Natesan, Mirasdar, Kuruppam Palayam, Vangal Post, Karur (Taluka), Trichy (Distt.).

*20. P. S. Srinivasan B.Sc., B.L., Advocate & Mirasdar, Nanjai Pugalur, Velayuthampalayam P. O. (Trichy Distt.).

21. Shri R. Rengaswamy, Vangal P. O., (*Via*) Karur, S. Rly., Tiruchi Distt.

Maharashtra

*1. Prof. D. G. Walawalkar, M. S. (Louisiana), Secretary, Akhil Bhartiya Tad Gud Sahakari Mahasangh Ltd., Dahanu.

2. Shri S. G. Bhamburkar, 1187/6, Shivajinagar, Poona-5.

*3. Shri G. K. Bhopatkar, Indira Niwas, 1206 A/26, Shivaji Nagar, Opposite Sambhaji Park, Poona-4.

Kerala

1. Pampa-Valley Sugarcane Growers' Association, Valanjavattom, Tiruvalla.

2. President, Travancore Sugarcane Growers' Association, Tiruvalla.

Mysore

1. Sugarcane Growers' Association, Hospet, Bellary Distt.

2. K. Vasudeva Rao, Landlord, Kamalapur P. O., Bellary Distt.

D. GOVERNMENTS AND GOVERNMENT DEPARTMENTS:

*1. The Chief Director (Sugar), Directorate of Sugar and Vanaspati, Jamnagar House, Shahjahan Road, New Delhi.

*2. The Secretary, Development Council for Sugar Industry, Jamnagar House, Shahjahan Road, New Delhi.

*3. The Secretary to the Government of India, Ministry of Food and Agriculturei New Delhi.

*4. Directorate of Economics and Statistics, Ministry of Food and Agriculture, New Delhi.

*5. The Director, National Sugar Institute, Nawabganj, Kanpur.

*6. The Secretary, Indian Central Sugarcane Committee, 19-20, Rohtak Road, Delhi.

*7. The Director, Indian Institute of Sugarcane Research, Rae-Bareli Road. P. O. Dilkusha, Lucknow.

*8. The Director, Sugarcane Breeding Institute, Coimbatore.

*9. Cane Commissioner, Patna.

*10. Cane Commissioner, Lucknow.

*11. Cane Commissioner, Chandigarh.

*12. The Chief Secretary to the Government of Uttar Pradesh, Lucknow.

*13. The Chief Secretary to the Government of Bihar, Patna.

*14. The Chief Secretary to the Government of Maharashtra, Bombay.

*15. The Chief Secretary to the Government of Andhra Pradesh, Hyderabad.

16. The Chief Secretary to the Government of Rajasthan, Jaipur.

17. The Chief Secretary to the Government of Madras, Madras.

18. The Chief Secretary to the Government of Mysore, Bangalore.

*19. The Chief Secretary to the Government of Punjab, Chandigarh.

*20. The Chief Secretary to the Government of Madhya Pradesh, Bhopal.

21. The Chief Secretary to the Government of Orissa, Bhubaneshwar.

22. The Chief Secretary to the Government of West Bengal, Calcutta.

23. The Chief Secretary to the Government of Kerala, Trivandrum.

24. The Chief Secretary to the Government of Gujarat, Ahmedabad.

25. The Chief Secretary to the Government of Assam, Shillong.

*26. Counsellor (Commercial) to the Embassy of India, 2107, Massachusetts Avenue, N. M. Washington-8, D.C. (U.S.A.).

*27. Indian Trade Commissioner, Caltex House, 10th Floor, 167-187 Kent Street, Sydney (Australia).

*28. First Secretary (Commercial) to the Embassy of India, 914-Nabrske, Manila (Philippines).

29. Second Secretary (Commercial) to the Embassy of India, P. B. No. 118, 44 Kebon Sirih, Djakarta (Indonesia).

30. First Secretary (Commercial) to the Embassy of India, Lavalle 462, 5th Floor, Buenos Airs (Argentia).

31. First Secretary (Commercial) to the Embassy of India, Rua Barao De Flamengo 22, Apt. 801-802, Rio De Janeiro (Brazil).

32. Office of the Commissioner, Government of India, Camp-de-Mars, Port Louis, Mauritius.

E. OTHERS :

1. The Sugar Technologists' Association of India, Nawabganj, Kanpur.

2. Prof. D. R. Gadgil, Director, Gokhale Institute of Politics & Economics, Poona-4.

*3. The Cawnpore Sugar Merchants' Association, 51/57, Collectoraganj, Kanpur.

*4. Shri Ramchander, B.Sc., Fellow, Sugar Technologists' Association, Rayagada, Koraput Distt. (Orissa).

APPENDIX III

(*Vide* paragraph 3.3)

A. *List of places and factories visited by the Commission*

	Date of Visit
1. *Places*:	
(i) Patna	17th March, 1961.
(ii) Kanpur	20th March, 1961.
(iii) Lucknow	21st March, 1961.
(iv) New Delhi	22nd March, 1961.
(v) Poona	29th March, 1961.
(vi) Madras	14th April, 1961.
2. *Factories*.	
(i) Rhotas Industries Ltd., Dalmianagar, (Bihar)	16th March, 1961.
(ii) Burhwal Sugar Mills Ltd., Burhwal, Distt. Barabanki (U.P.).	20th March, 1961.
(iii) Daurala Sugar Works, Daurala, Distt. Meerut, (West U.P.).	23rd March, 1961.
(iv) Walchandnagar Industries, Station Bhigwan, P. O. Walchandnagar, Distt. (Poona).	29th March, 1961.
(v) Malegaon Sahakari Sakhar Karkhana Sangh Ltd., Malegaon B.K., Taluk, Baramati, Distt. (Poona).	30th March, 1961.
(vi) Cauver, Sugars and Chemicals Ltd., Pettaivaytalai, Trichinopoly Dist.	15th April, 1961.
(vii) The East India Distilleries & Sugar Factories Ltd., Nellikuppam (S.A. Distt.).	15th & 16th April, 1961.
(viii) The Deccan Sugar & Abkari Co. Ltd., Pugalur, Trichinopoly Distt.	

B. List of persons who attended the Commission's inquiries/participated in the discussions

Patna, dated 17th March, 1961.

A. CANE GROWERS:

1. Shri Nand Kishore Narain . .	Representing	Bihar State Cane Growers' Co-operative Association.
2. Shri Bipin Bihari Sinha . .	,,	Ditto.
3. Shri Bhubaneshwar Prasad Rai .	,,	Ditto.

B. SUGAR MILLS ASSOCIATION:

1. Shri J. P. Saxena . . .	Representing	Indian Sugar Mills Assn. (Bihar Branch).
2. Shri Tulsidas Kanoria . . .	,,	Ditto.
3. Shri C. J. Mehta . . .	,,	Ditto.
4. Shri R. P. Mishra . . .	,,	Ditto.
5. Shri S. S. Kanodia . . .	,,	Ditto.
6. Shri J. S. Mehta . . .	,,	Indian Sugar Mills Association Calcutta.

C. GOVERNMENT DEPARTMENTS:

1. Shri R. P. Sinha, Under Secretary .	Representing	Government of Bihar.
2. Shri H. N. Prasad, Dy. Secretary .	,,	Ditto.
3. Shri Jitendra Prasad, Cane Commissioner.	,,	Ditto.
4. Dr. Thakur, Director . . .	,,	Sugarcane Research Institute, Pusa.
5. Shri S. N. Pande . . .	,,	Labour Commissioner, Bihar.
6. Shri S. Ramanujam . . .	,,	Director of Agricultural Research, Bihar.

Kanpur, dated 20th March, 1961.

Dr. Gundu Rao, Director . .	Representing	Natioal Sugar Institute.
1. Shri D. R. Parashar . . .	,,	The Sugar Technologists' Association of India.
2. Shri V. D. Jhunjhunwala . .	,,	Ditto.
3. Shri N. C. Verma . . .	,,	Ditto.

Lucknow, dated 21*st March*, 1961.

A. CANE GROWERS' ASSOCIATION :

1. Shri M. L. Varma . . .	Representing	The U. P. Co-operative Cane Unions' Federation Ltd.
2. Shri K. V. Singh . . .	,,	Ditto
3. Shri V. M. Singh . . .	,,	Ditto.
4. Shri Genda Singh . . .	,,	Ditto.
5. Shri R. K. Sahi . . .	,,	Ditto.
6. Shri R. J. Garg	,,	Ditto.

B. SUGAR MILLS' ASSOCIATION :

1. Shri D. R. Narang . . .	Representing	Indian Sugar Mills' Association, Calcutta.
2. Shri R. P. Nevatia . . .	,,	Ditto.
3. Shri Kishori Lal	,,	Ditto.
4. Shri Sitaram Bhowsinghka . .	,,	Ditto.
5. Shri Jagdish Prasad Sahu . .	,,	Ditto.
6. Shri D. R. Dani	,,	Ditto.
7. Shri B. P. Khetan . . .	,,	Ditto.
8. Shri V. D. Jhunjhunwala . .	,,	Ditto.
9. Shri Raja Avdhesh Pratap Singh .	,,	Ditto.
10. Shri Tej Bahadur Singh . .	,,	Ditto.
11. Shri C. J. Mehta . . .	,,	Ditto.
12. Shri B. N. Khanna . . .	,,	Ditto.
13. Shri R. P. Mishra . . .	,,	Ditto.
14. Shri J. C. Aurora . . .	,,	Ditto.
15. Shri J. S. Mehta	,,	Ditto.
16. Shri Mata Din Khetan . .	,,	Ditto.
17. Shri R. P. Saxena . . .	,,	Ditto.

C. GOVERNMENT DEPARTMENT :

1. Shri Shri Pat, Secretary . .	Representing	Government of U. P.
2. Shri M. Zunnurain, Dy. Secretary	,,	Ditto.
3. Shri K. N. Channa, Secretary, Cane & Co-op. Dept.	,,	Ditto.
4. Shri V. S. Chooramani, Cane Commissioner.	,,	Ditto.
5. Shri R. R. Panje, Director . .	,,	Indian Institute of Sugarcane Research

New Delhi, dated 22nd March, 1961.

A. SUGAR MILLS AND THEIR ASSOCIATION :

1. Shri D. D. Puri	Representing	Indian Sugar Mills' Association, Calcutta.
2. Shri J. S. Mehta	,,	Ditto.
3. Shri R. P. Nevatia . . .	,,	Ditto.
4. Shri R. P. Mishra . . .	,,	Ditto.
5. Shri B. P. Jain	,,	Ditto.
6. Shri C. J. Mehta . . .	,,	Ditto.
7. Shri T. N. Tiku	,,	Ditto.
8. Shri C. K. Virmani . . .	,,	Ditto.
9. Shri Vijay Singh	,,	The Ganganagar Sugar Mills and Govt. of Rajasthan.
10. Shri R. S. Dass Badhwar . .	,,	The Haryana Co-operative Sugar Mills Ltd., Rohtak.
11. Shri Jag Bir Sawhney . . .	,,	The Panipat Co-operative Sugar Mills Ltd., Panipat.

B. GOVERNMENT DEPARTMENTS :

1. Shri K. P. Jain, Chief Director (Sugar).	Representing	Directorate of Sugar & Vanaspati, New Delhi.
2. Shri Gyan Chandra, Director (Sugar).	,,	Ditto.
3. Mr. Dalip Singh, Cane Commissioner.	,,	Government of Punjab.
4. Shri M. L. Batra, Registrar . .	,,	Co-operative Societies Punjab.

Poona, dated 29th March, 1961.

A. CANE GROWERS :

Shri Jabir A. Ali	Representing	Deccan Plantation, Pvt. Ltd., Bombay (Farm in Andhra Pradesh).

B. CO-OPERATIVE SUGAR FACTORIES' ASSOCIATION :

1. Shri A. P. Shinde, Chairman .	Representing	Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd.
2. Shri S. A. Ghatge, Managing Director.	,,	Ditto.

3. Shri S. N. Jachak . . .	Representing	Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd.
4. Shri R. A. Unde	,,	Ditto.
5. Shri K. B. Rohmare . . .	,,	Ditto.
6. Shri R. B. Patil Kharde . .	,,	Ditto.
7. Shri J. K. Kapase . . .	,,	Ditto.
8. Shri D. N. Kadaskars . . .	,,	Ditto.
9. Shri U. D. Khole . . .	,,	Ditto.
10. Shri Shankarrao G. Date . .	,,	Ditto.
11. Shri V. E. Vikhe Patil . . .	,,	Ditto.
12. Shri S. T. Tambwekar . .	,,	Ditto.
13. Shri U. C. Jadhavrao . . .	,,	Ditto.
14. Shri Udhavrao	,,	Ditto.
15. Shri R. B. Nimbelkar . . .	,,	Ditto.

C. GOVERNMENT DEPARTMENT :

1. Dr. M. R. Mandlekar, Director of Industries.	Representing	Govt. of Maharashtra.
2. Dr. M. B. Ghatge, Director of Agriculture.	,,	Ditto.
3. Dr. Dakshindas, Sugarcane Specialist.	,,	Ditto.
4. Shri V. K. Joshi, Dy. Director, Agriculture.	,,	Ditto.
5. Shri N. D. Vaidya (Joint Registrar of Co-operative Societies, Sugar).	,,	Ditto.
6. Shri S. M. Acharya (District Deputy Registrar, Co-operative Societies).	,,	Ditto.
7. Miss K. K. Sobti (Assistant Registrar, Co-operative Societies, Sugar).	,,	Ditto.

D. OBSERVERS :

1. Shri S. S. Raina	Representing	Indian Sugar Mills' Association, Calcutta.
2. Shri D. B. Paranjape . . .	,,	Brihan Maharashtra Sugar Syndicate Ltd.
3. Shri K. R. Patwardhan . .	,,	Ditto.
4. Shri V. S. Wakankar . . .	,,	Ditto.

Madras, dated 14*th April*, 1961.

A. CANE GROWERS' ASSOCIATIONS :

1. Shri R. Venkatasubba Reddiar .	Representing	South Indian Sugarcane Growers' Association.
2. Shri V. Sambasivan . . .	,,	Ditto.
3. Shri T. M. Nallaswamy . .	,,	Ditto.
4. Shri P. S. Srinivasan . . .	,,	Ditto.
5. Shri P. Doraiswamy . . .	,,	Ditto.
6. Shri A. S. Naidu . . .	,,	Ditto.
7. Shri V. S. Tyagarajan . . .	,,	Ditto.
8. Shri Balaram Panicker . .	,,	Pampa-Valley Sugarcane Growers' Association.
9. Mr. John		
10. Shri M. Palaniswami Nainar .	,,	The E.I.D. & S.F. Ltd., Sugarcane Suppliers' Association.
11. Shri P. Sivaramakrishana Rao .	,,	Sugarcane Growers' Congress, Vuyyur.
12. Shri A. Raja Rao . . .	,,	Ditto.
13. Shri E. B. V. Ragava Rao . .	,,	Ditto.
14. Shri Anjayya	,,	Sugarcane Growers' Co-operative Association, Vuyyur.
15. Shri Visweshariyah . . .	,,	Ditto.

B. SUGAR MILLS' ASSOCIATIONS :

1. Shri H. J. Talsania . . .	Representing	South Indian Sugar Mills' Association.
2. Shri V. D. Hindocha . . .	,,	Ditto.
3. Shri T. Hanumiah . . .	,,	Ditto.
4. Shri B. G. Dass Gowda . .	,,	Ditto.
5. Shri K. S. Rao	,,	Ditto.
6. Shri S. Nangamurthu . . .	,,	Ditto.
7. Shri A. Ramaswami . . .	,,	Ditto.
8. Shri K. C. Kathu . . .	,,	Ditto.
9. Shri C. R. Vyasa Rao . .	,,	Ditto.
10. Shri Kesavamurthi . . .	,,	Ditto.
11. Shri O. Venkatasubba Reddy .	,,	Ditto.
12. Shri M. Marutham . . .	,,	Ditto.
13. Shri N. M. Naidu . . .	,,	Ditto.
14. Shri B. Viswanathan . . .	,,	Ditto.

15. Shri A. Anantanarayanan . .	Representing	South Indian Sugar Mills' Association.
16. Shri B. M. Krishnan . . .	,,	Ditto.
17. Shri M. Mallaraj. . . .	,,	Ditto.
18. Shri J. S. Prabhu . . .	,,	Ditto.
19. Shri T. A. Gopalakrishnan . .	,,	Ditto.
20. Shri D. V. Krishnamurthi . .	,,	Ditto.
21. Shri S. R. Banka . . .	,,	Ditto.
22. Shri P. N. Talati . . .	,,	Ditto.
23. Shri V. Ramakrishna . . .	,,	Ditto.
24. Shri R. P. Nevatia . . .	,,	Indian Sugar Mills' Association.

C. GOVERNMENT DEPARTMENTS :

1. Shri V. Karthikayan, Director of Agriculture.	Representing	Government of Madras
2. Shri V. Balasundaram, Registrar of Co-operative Societies.	,,	Ditto.
3. Shri V. K. Appandarajan, Joint Registrar of Co-operative Societies.	,,	Ditto.
4. Shri Mallraj Urs, Director of Agriculture.	,,	Government of Mysore.
5. Shri H. R. Arakeri, Joint Director of Agriculture.	,,	Ditto.
6. Shri D. V. Reddy, Director of Agriculture.	,,	Government of Andhra Pradesh.

D. OTHERS :

1. Shri C. K. N. S. Nagarajan, Member, Indian Central Sugarcane Committee.
2. Shri R. Nagan Gowda, Member, Indian Central Sugarcane Committee.

Bombay, dated 21*st April*, 1961.

A. CANE GROWERS' ASSOCIATIONS :

1. Sardar Lal Singh . . .	Representing	All India Cane Growers' Federation, 5, Jhandewalan Estate, Rani Jhansi Road, New Delhi.
2. Shri Genda Singh . . .	,,	The U.P. Co-operative Cane Unions' Federation, 12, Rana Pratap Marg, Lucknow.

3. Shri R. K. Sahi	Representing	The U.P. Co-operative Cane Unions' Federation, 12, Rana Pratap Marg, Lucknow.
4. Shri K. V. Singh	,,	Ditto.
5. Shri M. L. Varma . . .	,,	Ditto.
6. Shri K. M. Tripathi . . .	,,	Ditto.
7. Shri Bishambhar Singh . .	,,	Ditto.
8. Shri Bhubneshwar Prasad Rai .	,,	Bihar State Cane Growers' Co-operative Association Ltd., Patna.
9. Shri R. V. Reddiar . . .	,,	S.I. Sugarcane Growers' Association, 12, Avenue Road, Nungambakkam, Madras-6.
10. Shri L. K. Shah	,,	Hyderabad Sugarcane Growers' Association, P.O. Bodhan (C. Rly).
11. Shri Pitambar Singh . . .	,,	Ambala Cane Growers' Co-operative Society Ltd., Kesri Tehsil, Distt. Ambala.

B. SUGAR MILLS' ASSOCIATIONS :

1. Shri D. D. Puri	Representing	Indian Sugar Mills' Association, India Exchange, Calcutta-1.
2. Shri R. P. Nevatia . . .	,,	Ditto.
3. Shri J. S. Mehta	,,	Ditto.
4. Shri S. S. Raina	,,	Ditto.
5. Lala Dina Nath	,,	Ditto.
6. Shri R. P. Misra	,,	Ditto.
7. Shri B. P. Khetan . . .	,,	Ditto.
8. Shri T. D. Kanoria . . .	,,	Ditto.
9. Shri P. C. Jhunjhunwala . .	,,	Ditto.
10. Shri J. P. Saxena . . .	,,	Ditto.
11. Shri M. J. Edwards . . .	,,	Ditto.
12. Shri Rama Varma . . .	,,	Ditto.

13. Shri M. Khaitan	Representing	Indian Sugar Mills' Association, India Exchange, Calcutta-1.
14. Shri J. C. Aurora . . .	,,	Ditto.
15. Shri C. J. Mehta . . .	,,	Ditto.
16. Shri J. S. Prabhu . . .	,,	South Indian Sugar Mills' Association, No. 1, North Beach Road, Madras.
17. Shri F. Davidson . . .	,,	Ditto.
18. Shri S. A. Ghatge . . .	,,	Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., D.L.B. Building (Extension), Poona-2.
19. Shri Anna Saheb Shinde . .	,,	Ditto.
20. Shri K. B. Rohmare	,,	Ditto.
21. Shri R. V. Pant	,,	Ditto.
22. Shri A. R. Upadhyay . . .	,,	Ditto.
23. Shri P. R. Joshi	,,	Ditto.
24. Shri Y. D. Khole . . .	,,	Ditto.
25. Shri M. L. Apte	,,	Deccan Sugar Factories' Association, Industrial Assurance Building, Opp. Church Gate Station, Fort, Bombay.
26. Shri S. K. Somaiya . . .	,,	Ditto.
27. Shri G. K. Rege	,,	Ditto.

C. SUGAR FACTORIES :

1. Shri T. Hanumiah . . .	Representing	Mysore Sugar Co. Ltd., P. B. No. 564, Bangalore-2.
2. Shri M. Mallaraj . . .	,,	Ditto.
3. Shri L. Sreeramulu . . .	,,	Nizam Sugar Factory Ltd., P. B. No. 117, Hyderabad.
4. Shri V. Mahadevan . . .	,,	Parry & Co. Ltd., P. B. No. 12, Madras.

D. GOVERNMENT DEPARTMENTS :

1. Shri Gyan Chandra, Director (Sugar).	Representing	Directorate of Sugar & Vanaspati, Jamnagar House, Shahjahan Road, New Delhi.
2. Shri S. N. Gundu Rao, Director .	,,	National Sugar Institute, Nawabganj, Kanpur.
3. Shri S. P. Chandra	,,	Ditto.
4. Shri R. B. Saxena	,,	Ditto.
5. Shri S. E. Sukthankar, Secretary .	,,	Government of Maharashtra, Bombay.
6. Shri G. M. Lalwani, Joint Registrar of Co-operative Societies.	,,	Ditto.
7. Shri K. V. Seshadri	,,	Ditto.
8. Shri M. V. Pandit	,,	Ditto.
9. Dr. M. B. Ghatge	,,	Ditto.
10. Dr. D. G. Dakshindas . . .	,,	Ditto.
11. Shri M. R. Mandlekar . . .	,,	Ditto.
12. Shri K. Vijayam	,,	Government of Mysore, Bangalore.
13. Shri R. C. Sinha, Secretary . . .	,,	Government of Bihar Patna.
14. Shri R. P. Sinha, Under Secretary .	,,	Ditto.
15. Shri Jitendra Prasad, Cane Commissioner.	,,	Ditto.
16. Dr. Thakur, Director (Sugarcane Research Institute).	,,	Ditto.

E. SUGAR MERCHANTS' ASSOCIATION :

1. Shri G. S. Pandey	Representing	Cawnpore Sugar Merchants' Association, 51/57, Collectorganj, Kanpur.
2. Shri H. S. Chaturvedi	,,	Ditto.

APPENDIX IV

(*Vide* paragraph 4)

A summary of the practices of payment of cane prices in certain important Sugar producing countries

1. *Australia.*—Sugarcane is grown only for the purpose of supplying it to the mills. The relationship between the grower and the miller is controlled under the Sugarcane Prices Act of 1915, as amended from time to time. Under the Act the Central Cane Prices Board and the Local Cane Prices Board are constituted for (i) dividing raw sugar moneys between the farmer and the miller, (ii) regulating production, (iii) settling all matters relating to supply and transportation of cane from the farms to the mills. The marketing of sugar is undertaken by the Sugar Board which acquires the total output of raw sugar, arranges for refining and sales and determines the interim price to be paid for sugar.

Cane prices are fixed according to the quality of cane. The supply is subjected to cane and juice analysis. Using the results of the quality analysis, the commercial cane sugar content (c. c. s.) is calculated. The price payable to a grower is determined according to a formula which secures the division of raw sugar proceeds in the ratio of 2:1 between the farmer and the miller, when the cane is of 12 c. c. s. per cent and the mill recovery is 90 per cent. In case the cane is of higher c. c. s. the entire advantage goes to the farmer and *vice versa*. Similarly, the entire advantage of a higher mill efficiency is passed on to the miller. The farmer is paid on the basis of weekly average c. c. s. of cane supplied by him. The farmer's c. c. s. is calculated with reference to the weekly mill average, and if his c. c. s. is above the weekly mill average the farmer is paid a higher rate and if below, the price is lower, according to the prescribed scale.

2. *Indonesia.*—Most of the factories grow their own cane. Other cane growers and factories enter into contract for the supply of sugarcane soon after planting. The factories' staff survey the fields and prepare a programme of supply of cane to the factories which has to be adhered to by the growers. The factory crushes the cane of one grower at a time. This facilitates sampling of juice from cane brought by individual growers. A sample of the first expressed juice is taken from each farmer's cane and analysed for brix and pol content. Recoverable sugar per cent of cane is then calculated after obtaining the quality factor. The price of sugarcane payable to the grower is worked out according to a formula which gives the grower 55 per cent of the price of the recoverable sugar content of the cane. The formula is as under:—

$$\text{Price of cane per quintal} = \frac{R \times H}{1{,}000} \times 55$$

Where R is the recoverable sugar content of cane supplied by the farmer and H the average price of sugar fixed by the Government for the season.

The available sugar content is not related to any standard norm of efficiency but refers to the actual extraction of the factory concerned. The Indonesian Government announces before commencement of the crushing operations the average price of sugar for the season and the factories purchasing cane from the growers pay them on the basis of this price.

3. *U. S. A.*—In the U. S. A. payment for sugarcane is regulated in the chief cane producing States in Louisiana, Florida, Puerto Rico and Hawaii. The salient features of the systems operating in these States are as follows:—

(a) *Louisiana.*—Sugarcane prices are determined with reference to the basic price of a 'standard sugarcane' which is cane containing 12 per cent sucrose in the normal juice and with a purity of at least 76.00 per cent. The basic price for 'Standard sugarcane' is fixed by Government per ton per each one cent per pound of raw sugar. The raw sugar price taken is the weekly or season's average price quoted by the Louisiana Sugar Exchange. The cane supplied by the farmer is converted into 'standard sugarcane' for determining payment. A cane with a higher sucrose in normal juice gets a premium over the standard cane and one with a lower sucrose contents gets penalised.

(b) *Puerto Rico.*—The payment of cane is made on the basis of recoverable sugar from cane. The yield of raw sugar is calculated with the help of a formula after the quality of cane is analysed. The minimum prices for cane are fixed annually as percentage of raw sugar yield. Option is provided to convert the payment into money. A share in molasses produced is also given to the growers.

(c) *Florida.*—As in Louisiana the basic or minimum price is fixed per ton of 'standard sugarcane' for each cent per pound of raw sugar. The 'standard sugarcane' is defined as cane containing 12.5 per cent sucrose in the normal juice. The purity factor is not applied. The cane is paid for in terms of 'standard sugarcane'. For the conversion of cane into the Standard quality, the supply is tested for sucrose content and with the help of the quality factor the 'standard sugarcane' content is calculated.

(d) *Hawaii.*—Most of the mills have their own farms. The sugarcane produced by the non-millers is processed on a toll basis. The rates for processing are laid down by the Govt. and are inclusive of marketing and handling expenses. These charges are the maximum that the miller can demand for processing and are established for each of the processors. The average rate is 45 per cent of raw sugar and molasses recovered from the cane, excluding trash. The sugar and molasses are sold to a co-operative marketing association. For the purpose of determining the proceeds the raw sugar (determined by quality analysis) and molasses (by customary methods) content of the cane is converted into dollers per cwt. of raw sugar.

4. *Cuba.*—Cane farms are generally owned by non-millers. The farmers receive payment in accordance with the provisions of the Sugar Co-ordination Law. Payment is made according to quantity. The payment for cane is settled in terms of participation in the sugar and molasses produced by the mill. The participation is based on the average yield of 96° sugar obtained by the mill and the average price of the sugar in the port ware houses from where it is shipped. In 1954 farmers' share was around 50 per cent. Generally the percentage participation varied inversely with the quantity supplied.

5. *Mexico.*—About 80 per cent of sugarcane grown is used in sugar production the balance being utilised for other purposes. The payment of cane takes place in terms of a Government Decree appearing every year. Sugarcane is valued at a uniform rate for all growers, derived from the tonnage of cane ground and the sugar production that has resulted. There is no individual determination of the quality of each farmer's supply and quality of cane is assessed only with reference to the mill's efficiency and the results it has achieved with the cane milled. About 50 per cent of the ex-factory proceeds of sugar and bye-products is paid to the cane grower subject to certain minimum recovery.

6. *Philippines.*—The cane is not purchased by the miller. The growers raise the cane and take it to the miller for processing it into sugar. The relationship between the farmer and the miller is governed by a Milling Contract. These contracts, in addition to the processing rates, stipulate the minimum quality requirements of the cane, methods of weighing, schedules of supply, transportation plans, minimum milling efficiency, systems of assessing quality, etc. The farmer has to regulate his harvesting and supply according to the programme drawn up for delivery of cane. On the basis of the chemical analysis, the yield of sugar and final molasses from cane is computed. The farmer is paid his share of the yield of sugar and molasses according

to the terms of the Agreement. His share varies from 55 to 60 per cent. It is determined by bargaining between the mill and the farmer. The farmer can sell his share at any price he can obtain. The mills have to accord storage facilities to the farmer's share of sugar for a specified period.

7. *Mauritius.*—Payment is made on recovery basis and the grower gets the value of 2/3 of the sugar computed to have been made from his cane on the basis of the test figures. The recovery is calculated on the basis of brix, pol and purity of the absolute juice.

APPENDIX V (a)

(*Vide* paragraph 7.4.1)

Statement showing area under sugarcane in different States from 1950-51 *to* 1959-60

('000 acres)

State	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
1 Uttar Pradesh	2,505	2,965	2,645	1,973	2,292	2,720	3,066	3,017	2,747	2,917
2 Bihar	410	336	359	299	327	378	403	376	405	443
3 West Bengal	54	47	53	48	57	62	60	58	66	81
4 Punjab	373	466	434	387	414	452	487	494	515	592
5 Rajasthan	42	61	42	40	53	65	83	83	49	69
6 Madhya Pradesh	90	105	80	67	71	100	131	122	85	99
7 Assam	58	59	68	64	60	64	63	65	68	68
8 Orissa	59	61	61	60	59	56	59	59	55	55
9 Madras	123	124	73	78	126	121	115	121	144	145
10 Kerala	2	1	1	6	17	18	19	22	22	22
11 Gujarat and Maharashtra	209	240	202	198	213	217	244	270	302	331
12 Mysore	103	115	103	112	112	117	124	133	141	147
13 Andhra Pradesh	178	199	138	139	176	175	180	176	181	183
Other territories	11	13	13	14	17	19	23	25	23	26
ALL INDIA	4,217	4,792	4,272	3,485	3,994	4,564	5,057	5,021	4,803	5,178

NOTE.—Figures for 1959-60 are provisional.

APPENDIX V (b)

(*Vide* paragraph 7.4.1)

Statement showing yield of cane per acre during 1950-51 *to* 1959-60

(In Tons)

State	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
1	2	3	4	5	6	7	8	9	10	11
1 Uttar Pradesh	11.4	10.6	10.0	10.5	12.3	10.81	11.41	10.12	11.2	11.0
2 Bihar	7.5	7.1	6.8	6.1	7.5	7.72	9.11	8.47	15.0	14.60
3 West Bengal	15.9	17.4	19.6	23.5	20.9	20.85	19.50	14.59	17.8	15.8
4 Punjab	11.7	11.5	11.2	11.3	12.4	12.31	11.06	13.65	14.1	14.5
5 Rajasthan	18.3	8.3	9.3	10.3	9.1	6.97	8.18	8.61	8.5	8.6
6 Madhya Pradesh	10.0	9.1	9.9	12.2	9.9	11.50	12.76	10.20	10.5	10.7
7 Delhi	5.0	8.0	6.0	6.6	6.0	7.14	7.00	6.36	..	..
8 Himachal Pradesh	4.5	3.0	3.0	3.0	3.0	5.33	6.00	4.75	..	..
9 Tripura	12.6	14.6	12.6	12.6	10.5	10.50	10.43	11.00	..	..
10 Assam	11.7	11.1	11.1	9.6	9.0	10.34	10.57	10.35	14.2	14.2
11 Jammu & Kashmir	..	..	..	3.0	3.0	3.00	3.00	3.00	..	..
12 Orissa	17.7	16.3	16.0	16.9	17.1	16.39	15.96	15.96	15.96	13.3
13 Madras	23.5	23.5	24.0	26.6	25.8	25.72	25.99	25.65	24.4	25.8
14 Kerala	..	..	..	..	21.3	18.39	18.58	15.82	15.9	16.3
15 Bombay (Maharashtra and Gujarat)	25.7	25.1	22.4	24.8	26.6	24.53	24.45	27.13	25.4	26.8
16 Mysore	22.5	21.3	18.0	22.5	22.9	4.76	25.23	24.11	27.8	26.1
17 Andhra Pradesh	26.1	26.3	27.0	26.4	28.2	29.46	29.04	27.88	*36.5	*34.3
ALL INDIA AVERAGE	13.2	12.5	11.6	12.5	14.2	13.00	13.25	12.74	14.7	14.5

* Subject to revision.

APPENDIX V (c)

(*Vide* paragraph 7.4.1)

Statement showing State-wise recovery of sugar per cent cane during 1948-49 *to* 1959-60

Sl. No.	State	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
1	Uttar Pradesh	9.93	9.64	9.81	9.27	9.75	9.88	9.67	9.71	9.69	9.93	9.60	9.69
2	Bihar	10.34	9.91	10.26	10.32	10.03	10.06	10.23	9.76	9.37	9.91	9.79	9.43
3	Maharashtra	11.00	11.84	11.61	11.08	11.51	11.77	11.68	11.64	11.60	11.18	11.46	11.75
4	Gujarat												10.70
5	Andhra Pradesh*	9.83	9.90	9.94	8.76	9.67	9.43	9.59	9.47	9.20	9.71	9.42	9.85
6	Madras	8.95	9.06	8.62	8.27	8.84	9.20	9.17	8.86	9.15	8.72	9.03	9.19
7	Punjab*	9.77	9.73	9.77	9.41	10.21	10.06	9.20	8.88	9.02	9.42	8.58	9.14
8	Madhya Pradesh*	9.29	9.05	9.22	9.31	9.39	9.48	9.66	9.50	9.77	9.77	9.62	9.72
9	Mysore	8.80	9.92	10.25	10.98	10.85	10.20	9.70	10.17	9.11	10.28	10.36	10.69
10	Rajasthan*	8.81	8.81	8.14	8.50	9.73	9.22	9.31	9.44	9.55	9.37	9.10	8.71
11	Kerala*	7.37	8.95	8.21	6.58	7.32	7.13	8.71	9.07	8.88	8.31	8.30	8.29

12	Orissa	10.43	9.22	9.76	9.02	8.14	8.25	8.87	8.05	7.43	9.46	9.45	9.27
13	West Bengal	10.69	10.55	11.25	10.87	10.33	10.05	10.99	10.46	8.84	9.40	10.27	9.07
14	Assam	..	..	..	..	..	..	..	..	..	..	7.69	7.34
	ALL INDIA	9.96	9.88	9.99	9.57	9.96	10.07	9.93	9.83	9.72	10.01	9.84	9.52

*NOTE.—Figures for these States upto the period 1954-55 relate to the old States of Andhra, Punjab, Madhya Bharat, Rajasthan and Travancore-Cochin.

Source:

Appendix V (a) and V(b)

1950-51 to 1957-58—Commission's Report on cost structure of Sugar and Fair Price payable to the Sugar Industry (1959).

1958-59 and 1959-60—Annual Report of Indian Central Sugar Cane Committee (1959-60).

Appendix V(c)

1948-49 to 1957-58—Indian Sugar Manual.

1958-59—National Sugar Institute, Kanpur.

1959-60—Based on figures of Directorate of Sugar and Vanaspati, New Delhi.

APPENDIX

(*Vide* para

Comparative statement of cultivation cost

Sl. No.	Source of information	Sugarcane						
		Area	Year	Variety of the sugar cane and crop period (Months)	Cost of production per acre	Yield per acre	Average cost per maund	Net return per acre
1	2	3	4	5	6	7	8	9
					Rs.	(Mds.)	Rs.	Rs.
1	Directorate of Economics & Statistics, Ministry of Food & Agriculture, New Delhi.	Meerut and Muzaffarnagar Districts, U.P.	1954-55 to 1956-57	Plant Sugar cane about 9 months	296	332	0.86	@182
2	Govt. of Bihar, Patna.	N. Bihar (30 villages)	1955-56 & 1956-57	..	..	..	1·06†	..
		S. Bihar (15 villages).	1955-56 & 1956-57	..	...	..	1·36†	..
3	Govt. of Andhra* Pradesh, Hyderabad.	Bobbili zone	..	10 to 14	548	490	1.12	..
		Anakapalli zone		12 to 14	1,240	1,088	1.12	
		Tanuku zone		12	926	870	1.05	
		Ramchandrapuram zone		12	1,190	1,034 −50	1.15	
		Chittoor zone.		12	814	810	1.05	
4	Govt. of Maharashtra (Sugarcane Research Station, Padegaon).	Padegaon farm.	..	Plant cane	1,726	1,143	1.51	..
				Adsali cane	2,452	1,715	1.43	
				Pre-seasonal cane.	2,081	1,415	1.47	

VI

graph 7.4.2)

and return on sugarcane and other crops

Alternative crops						
Crop	Crop period	Cost of production per acre	Yield per acre	Total income per acre	Net return	Remarks
10	11	12	13	14	15	16
		Rs.	Mds.	Rs.	Rs.	
Irrigated wheat	7 months	169	11.4	205 (gross income)	@@ 36 per crop.	
Maize, Barley,	..	..	..	..	130 per year (Net profit for Maize, barley & wheat)	†Tentative cost for production †at the delivery centre.
Wheat Paddy, Gram and Sugarcane.	..	..	..	..	152 per year (Net profit for early paddy, wheat, late paddy and gram) 115 per year (Net profit for sugarcane & maize).	
Paddy	5 for 1 crop	208	23	300	@@ 92 per crop	*No crop surveys are conducted. The figures are based on the conditions prevailing in the regions of the State.
Paddy	5-6 for 1 crop	177	32	474	@@297 per crop	
Paddy 1st crop	5½-6 for 1 crop	247	40	500	@@253 per crop	
Paddy 1st crop	6 for 1 crop	180	32	400	@@220 per crop	
Paddy 1st crop	5 for 1 crop	224	32	400	@@176 per crop	
Irrigated cotton	..	334	..	750	@@416	Data on cost of cultivation of alternative crops based on regular surveys are not available. The figures given here relate to Govt. farms in the State.
Rabi Jowar		274		392	@@118	
Ground-nut		305		345	@@ 40	
Gram		110		212	@@102	
Wheat		240		275	@@ 35	

APPENDIX

1	2	3	4	5	6	7	8	9
					Rs.	Mds.	Rs.	Rs.
5	Govt. of Madhya Pradesh, Bhopal.	..	..	12 to 15	430	350	1.22	137
6	Director of Agriculture, Punjab.	Punjab.	1960-61	12	1,056	800	1.32	240
7	South Indian Cane Growers' Association, Pugalur, Madras State.	Trichy District.	1959-60	12	1,595	1,090	1.46	169
8	Sardar Lal Singh, President, All-India Cane Growers' Federation, New Delhi.	U.P. & Bihar.	1955-56 to 1957-58	..	..	..	1.24	..
9	Shri Nand Kishore Narain, President, Bihar State Cane Growers' Coop. Association, Patna.	..	1959-60 (latest year)	..	‡457	‡258.5	1.75	@(–)33.6
10	Shri Bhubneshwar Prasad Rai, District Champaran, Bihar.	Champaran District, Bihar.	1959-60 (latest year)	18	†729	450	1.62	@Nil.
11	Shri K. Sundararajan, Kullittalai, Madras State.	Trichirapalli.	1959-60 (latest year)	..	1,530	953	1.61	@(+)9.53

VI—*Contd.*

10	11	12	13	14	15	16
		Rs.	Mds.	Rs.	Rs.	
(i) Wheat Irrigated	6 months	129	12	168	@@39	The figures given here are based on experiments conducted at Govt. Farms and enquiry from a few cultivators. No regular survey has been conducted. The figures are averages and do not relate to any particular year.
(ii) Paddy	2 to 4 "	119	15	180	@@61	
(iii) Cotton	6 to 7 "	59	2.5	75	@@16	
3 paddy crops	3½ to 5 months	1009·50	108 (plus 120 bundles of straw)	..	740·50	
plantain	12 to 13 months	874·50	800 (Bunches)	..	725·50	‡ Estimates of cost and yield include both plant and ratoon crop. No profit is calculated on land investment.
Paddy and chhitta	Less than a year.	130 per crop	20 (paddy) 5(chhitta)	300 per crop	@@340 per year (on the basis of two crops a year)	†Including transportation to the outstation. Does not include interest on capital invested in purchase of land.
Paddy*	6 months	..	..	..	140 for 1 crop	*Cultivator can have one more crop in a year and make Rs. 100 more.
Plantain					400 for a year.	

APPENDIX

1	2	3	4	5	6	7	8	9
					Rs.	Mds.	Rs.	Rs.
12	The E. I. D. & S.F. Ltd., Sugarcane suppliers' Association, Madras State.	Nellikuppam, S.A. District.	1958-59		1,730* (wet land)	953	1.73	(−)358@
13	Parry & Co. Ltd., Madras.	(i) Nellikuppam			1,055	1089	0.97	..
		(ii) Pugalur			862	1089	0.79	
		(iii) Samalkot			685	817	0.84	
		(iv) Pettaivaytalai			925	953	0.97	
		(v) Tiruvalla			560	681	0.82	

@Figures calculated by us. (Total realisation for cane at the prevailing minimum price minus cost of cultivation).

VI—*Contd.*

10	11	12	13	14	15	16
		Rs.	Mds.	Rs.	Rs.	
						*For 1959-60 cultivation cost is said to have increased by 17 per cent.
Nellikuppam						
(i) Gingelly & cotton including Millets.		230		552	@@322	
(ii) Groundnut & Ragi		640		1,080	@@440	
(iii) Paddy		300		480	@@180	
Pugalur						
(i) Paddy (double crop).		534		1,100	@@566	*Prices fluctuate widely-Prices shown are at higher levels.
(ii) Plantain*		1,200		1,900	@@700	
(iii) Turmeric*		720		1,400	@@680	
(iv) Groundnut		270		625	@@355	
Samalkot						
Paddy		100		400	@@300	
Pettaivaytalai						
(i) Plantain		1,255		1,955	@@700	
(ii) Paddy (1st crop)		240		700	@@460	
(iii) Paddy (2nd crop)		215		480	@@265	
Tiruvalla						
(i) Tapioca (6 months).		215		300	@@85	
(ii) Paddy		150		385	@@235	

@@Figures represent the difference between the total income per acre and the total cost of production, (*i.e.*, col. 14—col. 12).

APPENDIX VII

(*Vide* paragraph 10.2)

U.P. Co-operative Cane Unions Federation's schedule for deferred payment

RATES OF DEFERRED PAYMENT TO GROWERS PER MAUND OF CANE IN NAYE PAISE

Sugar recovery of the season	Cane supplies upto 31st December	Cane supplies after 31st December — Duration of crushing season in days: 119 days & below	120 to 129	130 to 139	140 to 149	150 to 159	160 to 169	170 to 179	180 to 189	190 to 199	200 to 209	210 and above
9.5	..	..	2	4	6	8	10	12	14	16	18	20
9.6	2	2	4	6	8	10	12	14	16	18	20	22
9.7	4	4	6	8	10	12	14	16	18	20	22	24
9.8	6	6	8	10	12	14	16	18	20	22	24	26
9.9	8	8	10	12	14	16	18	20	22	24	26	28
10.0	10	10	12	14	16	18	20	22	24	26	28	30
10.1	12	12	14	16	18	20	22	24	26	28	30	32
10.2	14	14	16	18	20	22	24	26	28	30	32	34
10.3	16	16	18	20	22	24	26	28	30	32	34	36
10.4	18	18	20	22	24	26	28	30	32	34	36	38
10.5	20	20	22	24	26	28	30	32	34	36	38	40
10.6	22	22	24	26	28	30	32	34	36	38	40	42
10.7	24	24	26	28	30	32	34	36	38	40	42	44
10.8	26	26	28	30	32	34	36	38	40	42	44	46
10.9	28	28	30	32	34	36	38	40	42	44	46	48
11.0 and above	30	30	32	34	36	38	40	42	44	46	48	50

APPENDIX VIII

(*Vide* paragraph 10.5.1)

Increase in return consequent on increase in minimum cane price from Rs. 1.44 to Rs. 1.62 in the different regions during 1959-60 at 10% recovery

Statement No. 1

Duration of the season (days of 22 hrs.)	90	100	110	120	130	1	150	160	170	180	190	200
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Northern Region .	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08	..	..
2. M. P. & Rajasthan .	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08	..	..
3. Southern Region .	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08	0.08	0.08

APPENDIX VIII—*Contd.*

(*Vide* paragraph 10.5.1)

Estimated increase in salaries and wages due to Wage Board Award (less gratuity and provision already made under contingencies), increase in return consequent on the above increase as also increase in minimum cane prices from Rs. 1.44 to Rs. 1.62 in different regions for 1960-61 at 10% recovery

Statement No. 2

(Rs. per maund of sugar)

Duration of the season (days of 22 hrs.)	90	100	110	120	130	140	150	160	170	180	190	200
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(a) *Northern Region* :—												
(i) Increase in salaries and wages	0.69	0.64	0.60	0.56	0.53	0.50	0.48	0.46	0.45	0.44	..	..
(ii) Increase in return for increase in cane cost and salaries and wages	0.15	0.14	0.14	0.13	0.12	0.12	0.11	0.11	0.11	0.10	..	..
(iii) TOTAL	0.84	0.78	0.74	0.69	0.65	0.62	0.59	0.57	0.56	0.54	..	..
(b) *M. P. and Rajasthan* :—												
(i) Increase in salaries and wages	0.67	0.62	0.58	0.55	0.52	0.49	0.47	0.45	0.43	0.43	..	..
(ii) Increase in return for increase in cane cost and salaries and wages	0.15	0.14	0.14	0.13	0.12	0.12	0.11	0.11	0.10	0.10	..	..
(iii) TOTAL	0.82	0.76	0.72	0.68	0.64	0.61	0.58	0.56	0.53	0.53	..	..
(c) *Southern Region* :—												
(i) Increase in salaries and wages	0.66	0.62	0.59	0.56	0.53	0.51	0.49	0.47	0.46	0.45	0.44	0.43
(ii) Increase in return for increase in cane cost and salaries and wages	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.10	0.10	0.09
(iii) TOTAL	0.80	0.76	0.72	0.69	0.65	0.63	0.61	0.58	0.57	0.55	0.54	0.52

APPENDIX VIII—*Concld.*

(*Vide* paragraph 10.5.1)

Estimated increase in Salaries and Wages due to Wage Board Award (less gratuity and provision already made under contingencies), increase in return consequent on the above increase as also increase in minimum cane price from Rs. 1·44 *to* 1.62 *in different regions for* 1961-62 *at* 10% *recovery*

Statement No. 3

(Rs. per maund of sugar)

Duration of the season (days of 22 hrs.)	90	100	110	120	130	140	150	160	170	180	190	200
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
(a) *Northern Region* :—												
(i) Increase in salaries and wages	0.75	0.69	0.65	0.61	0.57	0.54	0.52	0.50	0.48	0.47	..	..
(ii) Increase in return for increase in cane cost and salaries and wages	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.11	0.10	..	..
(iii) TOTAL	0.90	0.83	0.79	0.74	0.70	0.66	0.64	0.61	0.59	0.57	..	..
(b) *M. P. and Rajasthan* :—												
(i) Increase in salaries and wages	0.73	0.67	0.63	0.59	0.56	0.53	0.51	0.49	0.47	0.46	..	..
(ii) Increase in return for increase in cane cost and salaries and wages	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.11	0.10	..	..
(iii) TOTAL	0.88	0.81	0.77	0.72	0.69	0.65	0.63	0.60	0.58	0.56	..	..
(c) *Southern Region* :—												
(i) Increase in salaries and wages	0.73	0.69	0.65	0.61	0.58	0.56	0.54	0.52	0.50	0.49	0.48	0.47
(ii) Increase in return for increase in cane cost and salaries and wages	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.11	0.10	0.10	0.10
(iii) TOTAL	0.88	0.83	0.79	0.74	0.71	0.68	0.66	0.63	0.61	0.59	0.58	0.57

APPENDIX IX

(*Vide* paragraph 10.8)

1. *Statement showing deferred price per maund of cane payable under the proposed price-linking formula after allowing for rehabilitation and loss on export*

Area: U. P. and North Bihar

(Year 1958-59)

Recovery %	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5
No. of working days	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.
100	..	..	..	..	..	..	..	..	..	..	..	1.1
110	..	..	..	..	..	..	..	..	0.2	1.3	2.5	3.5
120	..	..	..	..	..	..	..	1.2	2.3	3.4	4.6	5.7
130	..	..	..	..	..	0.8	1.8	3.0	4.1	5.2	6.4	7.4
140	..	..	..	0.1	1.2	2.4	3.5	4.6	5.7	6.9	8.0	9.1
150	..	..	0.4	1.5	2.6	3.8	4.9	6.0	7.1	8.2	9.4	10.5
160	..	0.4	1.5	2.7	3.8	4.9	6.0	7.1	8.3	9.4	10.5	11.6
170	0.3	1.5	2.5	3.7	4.8	5.9	7.0	8.2	9.3	10.4	11.5	12.6
180	1.0	2.2	3.3	4.4	5.5	6.6	7.7	8.8	10.0	11.1	12.2	13.3

NOTE.—The above computations are based on the following assumptions:—

(i) Cane price—basic price of Rs. 1·440 per maund, co-operative society's commission at 9 pies (Rs. 0.0469) on 99.5% of the cane purchased in U. P. and at Rs. 0.05 on 54% of the cane purchased in Bihar. Driage of 1% on outside cane purchased and cess at 3 annas (Rs. 0.1875) per maund crushed in U. P. and Rs. 0.19 per maund crushed in Bihar.

(ii) Rehabilitation allowance provided at rates applicable for Northern region.

(iii) Loss on export at Rs. 0.06 per maund of sugar.

(iv) Selling price at Rs. 36.00 per maund of sugar.

APPENDIX IX—*Contd.*

(*Vide* paragraph 10.8)

2. *Statement showing deferred price per maund of cane payable under the proposed price-linking formula after allowing for rehabilitation and provisional loss on export*

Area: U. P. and North Bihar

(Year 1959-60)

Recovery %	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5
No. of working days	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.	nP.
110	..	..	..	..	..	..	..	..	..	..	0.4	1.6
120	..	..	..	..	..	..	..	..	0.1	1.3	2.5	3.7
130	..	..	..	..	..	..	..	0.7	1.9	3.1	4.3	5.4
140	..	..	..	..	..	..	1.2	2.4	3.6	4.8	5.9	7.1
150	..	..	..	..	0.3	1.5	2.6	3.8	5.0	6.1	7.3	8.6
160	..	..	..	0.3	1.4	2.6	3.7	4.9	6.1	7.3	8.4	9.6
170	..	..	0.1	1.3	2.5	3.7	4.8	6.0	7.2	8.5	9.5	10.7
180	..	..	0.9	2.0	3.1	4.4	5.5	6.7	7.9	9.0	10.2	11.4

NOTE.—The above computations are based on the following assumptions :—

(i) Cane price—basic price of Rs. 1.620 per maund, co-operative society's commission at 9 pies (Rs. 0.0469) on 99.5% of the cane purchased in U. P. and at Rs. 0.05 on 54% of the cane purchased in Bihar. Driage of 1% on outside cane purchased and cess at 3 annas (Rs. 0.1875) per maund crushed in U. P. and Rs. 0.19 per maund crushed in Bihar.

(ii) Rehabilitation allowance provided at rates applicable for Northern region.

(iii) Provisional loss on export at Rs. 0.50 per maund of sugar.

(iv) Selling price at Rs. 37.85 per maund of sugar.

APPENDIX IX—*Contd.*

(*Vide* paragraph 10.8)

3. *Statement showing deferred price per maund of cane payable under the proposed price-linking formula after allowing for rehabilitation and loss on export*

Area : Punjab

(Year 1958-59)

Recovery %	9.1	9.2	9.3	9.4	9.5
No. of working days	nP.	nP.	nP.	nP.	nP.
120	..	..	..	..	0.8
130	..	..	0.3	1.4	2.6
140	..	0.8	2.0	3.0	4.2
150	1.1	2.2	3.3	4.4	5.6

NOTE.—The above computations are based on the following assumptions :—

(i) Cane price—basic price of Rs. 1.440 per maund, co-operative society's commission at 9 pies (Rs. 0.0469) on the entire quantity purchased, driage @1% on outside cane and cess @Rs. 0.09 per maund of cane crushed.

(ii) Rehabilitation allowance provided at rates applicable for Northern region.

(iii) Loss on export at Rs. 0.06 per maund of sugar.

(iv) Selling price at Rs. 36.50 per maund of sugar.

APPENDIX IX—*Contd.*

(*Vide* paragraph 10.8)

4. *Statement showing deferred price per maund of cane payable under the proposed price-linking formula after allowing for rehabilitation and provisional loss on export*

Area : Punjab

(Year 1959-60)

Recovery %	9.1	9.2	9.3	9.4	9.5
No. of working days	nP.	nP.	nP.	nP.	nP.
140	..	..	..	0.3	1.6
150	..	..	0.5	1.7	3.0
160	..	0.5	1.6	2.9	4.1

NOTE.—The above computations are based on the following assumptions :—

(i) Cane price—basic price of Rs. 1.620 per maund, co-operative society's commission at Rs. 0.05 on the entire quantity purchased, driage @1% on outside cane and cess @Rs. 0.09 per maund of cane crushed.

(ii) Rehabilitation allowance provided at rates applicable for Northern region.

(iii) Provisional loss on export at Rs. 0.50 per maund of sugar.

(iv) Selling price at Rs. 38.35 per maund of sugar.

APPENDIX IX—*Concld.*

(*Vide* paragraph 10.8)

5. *Statement showing deferred price per maund of cane payable under the proposed price-linking formula after allowing for rehabilitation and provisional loss on export*

Area : South Bihar

(Year : 1959-60)

Recovery %	10.0	10.1	10.2	10.3	10.4	10.5
No. of working days	nP.	nP.	nP.	nP.	nP.	nP.
100	..	..	..	..	0.7	2.0
110	..	..	0.9	2.1	3.3	4.5
120	0.6	1.8	3.0	4.2	5.4	6.6

NOTE.—The above computations are based on the following assumptions :—

(i) Cane price—basic price of Rs. 1.620 per maund and co-operative society's commission at Rs. 0.05 on 54% of the cane purchased, driage of 1% on outside cane purchased and cess at Rs. 0.19 per maund crushed.

(ii) Rehabilitation allowance provided at rates applicable for Northern region.

(iii) Provisional loss on export at Rs. 0.50 per maund of sugar.

(iv) Selling price at Rs. 38.35 per maund of sugar.

APPENDIX X

(*Vide* paragraph 11.8)

Schedule showing provision to be made for rehabilitation in applying Sugar and Sugar cane price-linking formula

(Rs. per md. for 10% recovery)

Duration (days of 22 hrs.)	90	100	110	120	130	140	150	160	170	180
A. Northern Region	0.62	0.57	0.52	0.48	0.45	0.42	0.40	0.38	0.36	0.35
B. M. P. & Rajasthan	0.32	0.29	0.26	0.24	0.22	0.21	0.20	0.19	0.18	0.17

GIPN—S3—3 T. C. Bom./62—4-3-63—600.

सत्यमेव जयते