

TARIFF COMMISSION
GOVERNMENT OF INDIA

REPORT
ON THE
REVISION OF PRICES OF
CEMENT
INDUSTRY

सत्यमेव जयते

BOMBAY

1953



R E P O R T
OF THE
T A R I F F C O M M I S S I O N
ON THE
VISION OF PRICES OF
CEMENT

BOMBAY
1953

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| | | | |
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| Dr. D.K. Malhotra, M.A., Ph. D. | ... | ... | <i>Secretary</i> |



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GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY

RESOLUTION
Cement Prices

New Delhi, the 1st February, 1954.

No. SC(B)-8(257)/54. In their Resolution No. 3-T(5)/52, dated the 6th December, 1952, the Government of India requested the Tariff Commission to examine and recommend whether any revision in the existing price of cement was called for. The Commission having conducted its enquiry has submitted its report. Its main conclusions and recommendations are as follows:-

- (i) The basic price of naked cement for all companies (other than 5 high cost units for which an extra price has been recommended) should be fixed at Rs. 72/- per ton f.o.r. destination instead of Rs. 71/- as at present.
- (ii) An extra price of Rs. 8/- per ton in the case of Shri Digvijay Cement Co., India Cement Ltd., Orissa Cement Ltd., and Travancore Cements Ltd., and Rs. 5/- per ton in the case of Mysore Iron and Steel Works should be given to enable these units to maintain their production and offset the disadvantages of high costs during the period of price fixation.
- (iii) A uniform all-India selling price of Rs. 73/- per ton for naked cement f.o.r. destination applicable to all the factories should be fixed. For enforcing this price Government should set up a Fund into which the difference between the basic price and the uniform selling price would be paid by units

other than the high cost units for reimbursing therefrom to the high cost units the extra price referred to above.

- (iv) Packing charges for cement should be fixed on the basis of the average of maximum and minimum price of the packing material during each week of the 8 months immediately preceding the date from which the charges are intended to come into force.
- (v) The basic price of cement and the extra price for the high cost units as indicated above should be fixed for a period of three years.
- (vi) The movements of cement supplied by different factories should be so regulated as to avoid as far as possible uneconomic and wasteful transport.
- (vii) The question of rebate payable by the Cement companies to Government for the cement supplied to them should be negotiated by the companies concerned with Government.
- (viii) It would be beneficial for the high cost units if the cement produced is allowed to be exported to foreign countries in reasonable quantities.

2. The Government of India generally agree on the principles adopted by the Commission for determining the cost of production of cement in the various factories and accept its recommendations subject to the modifications explained in the succeeding paragraphs.

3. The Commission has recommended a price of Rs. 72/- per ton, which provides for a return of 10% on the gross block and includes an element of about Rs. 3.9 per ton for rehabilitation and expansion. The Government of India consider that, as in the case of steel, the return on block should be only 8 per cent. This would mean a reduction of about Rs. 1/8/- per ton in the price of cement recommended by the Commission. The Government of India do not consider

that an allowance for rehabilitation and expansion should automatically form part of the price of cement. In their view, there is no justification for allowing such an element in the case of the high cost units referred to in para. 4 below in respect of whom the ceiling fixed in regard to the price they might charge, is higher than that for the standard units. In other cases, where there is need to make such special provision in the price, the Government propose to adopt the procedure described in para. 5 below. For these considerations, and having regard to the desirability of maintaining a stable price for a reasonable period, the Government have decided to treat Rs. 67/- per ton f.o.r. destination as the standard ceiling price of cement.

4. In the case of the following five factories whose costs of production are higher than others, the Tariff Commission has computed that the f.o.r. destination price for these units would have to vary between Rs. 83.4 per ton in the case of Mysore Iron & Steel Works to Rs. 103.7 per ton in the case of Travancore Cements Ltd. to permit of an earning a return of 10% on block and meet depreciation and costs on the same basis as other factories:-

1. The Mysore Iron & Steel Works.
2. M/s. Shri Digvijay Cement Co.
3. M/s. India Cements Ltd.
4. M/s. Orissa Cements Ltd.
5. M/s. Travancore Cements Ltd.

The Commission, however, has recognised that it would not be justifiable to fix the ceiling prices of cement at these levels and has recommended prices that are lower than these figures but are still above that for the standard units. In the case of Mysore Works, the Commission has recommended Rs. 5 and in the case of other four Rs. 8 per ton more than the price recommended by them of Rs. 72/- per ton for other units. The Government of India agree with the bases of reasoning underlying this recommendation of the Commission, namely, that the higher cost units should not

expect returns on the same scale as other units. The Government also consider that for some time to come there is no need in the case of these units to make a special provision for rehabilitation and expansion, nor would the addition of the special element for rehabilitation to the higher ceiling fixed in the case of the high cost units be justifiable from the consumers' point of view. On these considerations, the Government of India have decided that the f.o.r. destination ceiling price of cement to be sold by these factories will be as follows:-

| | |
|-----------------------------------|--|
| 1. The Mysore Iron & Steel Works. | Rs. 72 per ton (i.e., Rs. 5 more than the standard ceiling price). |
| 2. M/s. Shri Digvijay Cement Co. | Rs. 75-8-0 per ton (i.e., Rs. 8-8-0 more than the standard ceiling price). |
| 3. M/s. India Cement Ltd. | } Rs. 75 per ton (i.e., Rs. 8 more than the standard ceiling price). |
| 4. M/s. Orissa Cements Ltd. | |
| 5. M/s. Travancore Cements Ltd. | Rs. 79 per ton (i.e., Rs. 12 more than the standard ceiling price). |

5. The Government of India agree with the recommendations of the Commission that the units having a programme of rehabilitation and expansion should be assisted in carrying out such programmes. The Government accept the recommendation of the Tariff Commission that for this purpose an allowance of Rs. 3.9 (or Rs. 4 in round figure) per ton would be adequate. But the Government are of the view that while permitting any unit to add this element to its ceiling price, it is essential to ensure that this special element will be used exclusively for the purposes intended. After deduction of taxes, the amount of Rs. 4 per ton will yield a little over Rs. 2. It is the intention of Government that Rs. 2/- per ton should be held by the units concerned in a separate fund and the fund operated by them with the consent of the Government exclusively for the aforesaid purposes.

(v)

This allowance will not be admissible in the case of those units which, though standard cost units, have not agreed to maintain and operate the Fund in the manner indicated above.

6. While the Government of India agree with the Tariff Commission on the desirability of having a uniform all-India selling price as recommended by the Commission, the setting up of a fund for this purpose is beset with serious administrative difficulties and cannot be considered for the present and the prices that will operate will be those indicated in paras, 3 to 5 above.

7. The Government of India have also decided that these decisions will be given effect to from the 8th February, 1954 and will remain in force until further orders.

Sd./- H.Y.R. IENGAR,

Secretary to the Government of India.

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REPORT ON THE REVISION OF PRICES OF CEMENT

The control over price and distribution of cement came into force for the first time in August, 1942, when the consumption of cement on Government account increased considerably and 90 per cent. of the country's production was taken up for defence purposes. To ensure adequate supply of cement for urgent Government purposes, both military and civil, the Government of India, under the Defence of India Rules, instituted control over the entire production of cement. The price for supplies to Government was determined on 'cost plus' basis. As consumption on Government account decreased in later years, Government in consultation with the main producing concerns, viz., Associated Cement Companies and Dalmia Group, agreed to release the surplus cement for public consumption and the price for supplies of cement to the public was fixed in March, 1944, at Rs. 70 per ton F.O.R. destination. The price was revised from time to time with reference to the then prevailing conditions and it varied between Rs. 70 and Rs. 60 per ton from March, 1944, to March, 1947.

With the lapse of the Defence of India Rules in September, 1946, there was no legal basis for the continuance of control over cement but a system of informal control had since been maintained partly by a 'gentleman's agreement' with the producers and partly by coordination of legislation by States. By about September, 1946, Government offtake became too small to warrant the continuance of the 'cost plus' arrangement. A new contract was entered into by Government

with the producers from 1st November, 1946, for a period of six months. The salient features of the new contract were:-

- (i) The Central Government would determine the selling price of cement in full wagon load on f.o.r. destination basis, which would be uniform throughout the country, and the State Governments would notify it and also fix the retail prices, under the State laws.
- (ii) The price would be subject to revision on the following three variables:-
 - (a) cost of gunny bags;
 - (b) cost of coal; and
 - (c) cost of labour.
- (iii) The price to be charged for Government supplies would be the price fixed per ton for the sale of cement to the public less the amount of freight average taken into account in arriving at the price fixed for supplies to the public and less Rs.3 being a special rebate allowed to Government.

Prices for supplies to Government have since been fixed on the above basis. The price of cement for public consumption was fixed by the Government of India at Rs. 60 per ton with effect from 1st November, 1946, on the basis of cost of production of the factories belonging to Associated Cement Companies Ltd. (A.C.C.), the largest producers of cement in the country. From 12th March, 1947, the price was increased to Rs. 65 per ton.

During the latter part of 1947, A.C.C. and Dalmia Group represented that the then existing price of Rs. 65 per ton was uneconomic and urged for an immediate increase, on account of the increase in manufacturing costs such as labour, coal, gunny bags, etc., and in railway freight. After examining the cost of production of A.C.C. factories, Government raised the price of cement to Rs. 87-8-0 per ton with effect from 24th December, 1947, for a period of six months.

From 7th June, 1948, it was reduced to Rs. 85 per ton and from 15th August, 1948, it was further reduced to Rs. 82-8-0 per ton provisionally subject to revision on the results of cost investigation of A.C.C. factories. The cost investigation was completed in September, 1948, and the provisional price of Rs. 82-8-0 per ton was confirmed. This price was made up of Rs. 55-8-0 for naked cement, Rs. 11-8-0 on account of packing charges and Rs. 15-8-0 on account of railway freight average.

The other cement companies, including those belonging to Dalmia Group, represented that it would not be possible for them to sell cement at Rs. 82-8-0 per ton which was fixed on the basis of cost of production of A.C.C. factories and that the price of cement manufactured by them should be determined on the basis of cost of production of their factories. After examining the costs of production of factories belonging to Dalmia Group, it was considered that no increase in price was justified, as these companies were making reasonable profit. In the case of three new units which had just come into production, viz., India Cements Ltd., Travancore Cements Ltd., and Shree Digvijay Cement Company Ltd., Government, however, decided to grant an increase of Rs. 7-8-0 per ton over the then existing price of Rs. 82-8-0 per ton, with effect from 1st July, 1949, in consideration of the higher capital cost incurred by them. This concession was granted initially for a period of one year but was later extended. It was withdrawn with effect from 1st April, 1952. The main reason for withdrawing the increase was that the experience of the working of these new units showed that under normal conditions, their production averaged about 110 per cent. of their rated capacity as against about 80 per cent. output of older efficient units. As these new units were located in surplus areas it was possible to allow them to export sizeable quantities of cement from time to time. There is no control over export price of cement and the price they were able to secure ranged between Rs. 110 to Rs. 120 per ton f.o.b. Indian ports. The

profit and loss accounts of the companies also showed that they had not done badly. It was felt that, in any case, it was time that these new units should by their own efforts be able to reduce their cost of production to more or less that of the older units and make reasonable profit.

Till 31st May, 1951, packing charges at Rs. 11-8-0 per ton were considered as one of the elements included in the selling price of cement. With effect from 1st June, 1951, the packing charges were separated from the selling price of cement in view of the rising cost of packing materials, and the revised price of cement for supplies to the public was fixed at Rs. 71 per ton f.o.r. destination plus actual cost of packing, subject to a maximum of Rs. 26 per ton. Due to fall in the price of gunny bags from the early part of 1952 it was decided that packing charges should be revised every quarter on the basis of the average market prices of packing materials on the first day of each month during the nine months immediately preceding the date from which the charges were intended to be in force plus Rs. 1-4-0 per ton of cement to cover incidental charges. On this basis, the packing charges for new gunny bags were fixed at Rs. 14-11-0 per ton of cement for the period from 1st December, 1952, to 31st March, 1953. With effect from 1st April, 1953, they were reduced to Rs. 12-4-0 per ton and they have been further reduced to Rs. 11-14-0 per ton with effect from 1st July, 1953.

Railway freight average included in the price is Rs. 15-8-0 per ton. A few factories in Bihar, Orissa, Saurashtra and in South India were, however, permitted to make supplies on the basis of ex-works price plus actual freight to a few distant destinations, where supplies could not be made within the freight average of Rs. 15-8-0.

2. Towards the end of 1952, all the cement manufacturers represented to Government that an increase in price was necessary as their cost of production had increased on account of the increase in railway freight on coal, labour charges,

Reference to
the Commission.

cost of raw materials, etc. The Government of India, in the Ministry of Commerce and Industry, by their Resolution No. 3-T(5)/52, dated 5th December, 1952, requested the Tariff Commission to examine the question whether there should be an increase in the price of cement (vide Appendix I).

3. (a) On 18th December, 1952, the Commission wrote to the various cement manufacturing companies asking them to submit statements of their costs of production and balance sheets and profit and loss accounts for the three years beginning with 1950. After a preliminary examination of the cost data received from the various firms, the Commission decided to depute its Cost Accounts Officers to examine the detail of cost of production of all the units except A.C.C. in whose case, in consultation with the Company, only six units were selected for costing. The names of the factories selected for costing and the names of the Cost Accounts Officers who carried out the cost investigations are given in Appendix II. On 14th January, 1953, the Commission issued a detailed questionnaire to the manufacturers covering all aspects of the industry.

(b) Shri M.D. Bhat, Chairman, and Shri B.N. Adarkar, Member, visited the cement factories at Sevalia and Dwarka belonging to A.C.C. on 4th and 10th March, 1953, and the factory of Shree Digvijay Cement Co. Ltd., at Sika on 9th March, 1953. Dr. B.V. Narayanaswamy Naidu, Member, accompanied by Shri S.S. Mehta, Technical Adviser, visited the factories of India Cements Ltd., at Talaiyuthu and Travancore Cements Ltd., at Kottayam, on 28th February and 5th March, 1953. Shri B.N. Das Gupta, Member, visited the factories of Rhotas Industries Ltd., at Dalmianagar and Sone Valley Portland Cement Co. Ltd., at Japla, on 4th March, 1953, and Kymore Cement Works of A.C.C. at Jukehi on 11th March, 1953. Shri C. Ramasubban, Member, visited the factories of Patiala Cement Company Ltd., at Surajpur and Dalmia Dadri Cement Ltd., at Dalmia Dadri on 5th and 7th March, 1953. Shri S.S. Mehta, Technical Adviser, also visited the factories of Rhotas Industries Ltd., and Sone Valley Portland Cement Co. Ltd., at Dalmianagar and Japla on 26th and 27th February, 1953.

(c) The Commission held discussions with the representatives of the various companies separately from 23rd to 25th April, 1953. On 27th April, 1953, a joint discussion with all the cement manufacturers was held and the various problems confronting the industry were discussed. A list of representatives who took part in the discussions is given in Appendix III.

4. (a) At present, there are twenty-three factories in India, of which eleven belong to A.C.C., one is a subsidiary of A.C.C., ten are independent concerns, and one is owned by the Government of Mysore. The total installed capacity of these twenty-three factories on 1st January, 1953, was stated to be 4.00 million tons. Of these, seven factories have an installed capacity of less than 100,000 tons each. The installed capacity as on 1st January, 1953, and actual production (in terms of cement ground) during the last three years are given below:

| | Installed capacity | Actual production (Million tons) | | |
|---|--------------------|-------------------------------------|------|------|
| | | 1950 | 1951 | 1952 |
| A.C.C. factories ... | 2.13 | 1.53 | 1.72 | 1.81 |
| Factory of Patiala Cement Co. Ltd. (subsidiary of A.C.C.) ... | 0.30 | 0.20 | 0.24 | 0.26 |
| Other factories ... | 1.57 | 0.83 | 1.20 | 1.45 |
| Total | 4.00 | 2.56 | 3.16 | 3.52 |

Details regarding the location, year of commencement of production, installed capacity and actual production of each of the twenty-three factories are given in Appendix IV.

From the regional standpoint, the distribution of factories is uneven, as is shown by the statement on page 7.

| State | No. of units | Installed capacity as on 1st January, 1953 | |
|-------------------|--------------|--|--------------------------------------|
| | | (Lakh tons) | |
| Bihar | 5 | 9.36 | |
| Bombay | 1 | 2.00 | |
| Hyderabad | 1 | 2.40 | |
| Madras | 5 | 8.25 | |
| Madhya Pradesh | 1 | 3.50 | |
| Mysore | 1 | 0.83 | |
| Madhya Bharat | 1 | 0.60 | |
| Orissa | 1 | 1.65 | |
| PEPSU | 1 | 3.00 | |
| Rajasthan | 2 | 1.10 | |
| Saurashtra | 3 | 3.77 | |
| Travancore-Cochin | 1 | 0.50 | |
| Total | 23 | 39.86 | (or 4.00 millions approximately). |

Important consuming areas like Uttar Pradesh, Bengal and Assam States do not have at present any cement factories located within their borders and have to obtain their supplies of cement from other States. (Vide map attached).

The twenty-three factories may be divided broadly into four categories according to the year of their establishment:

- those which commenced production in 1925 or before;
- those which commenced production between 1925 and 1940;
- those which commenced production between 1940 and 1949; and
- those which commenced production in 1949 and subsequent years.

Seven factories are in the first category of which six belong to A.C.C., viz., Lakheri Cement Works, Banmor Cement

Works, Dwarka Cement Works, Kymore Cement Works, Porbandar Cement Works and Shahabad Cement Works and one is an independent concern, viz., Japla Cement Works belonging to Sone Valley Portland Cement Company Ltd. Nine factories are in the second category of which three, viz., Khalari Cement Works, Kistna Cement Works and Madhukkarai Cement Works belong to A.C.C. Group and one, viz., Bhupendra Cement Works belongs to Patiala Cement Company Ltd., which is a subsidiary of A.C.C. Five factories, viz., Dalmia Dadri Cement Ltd., Dalmia Cement (Bharat) Ltd., Andhra Cement Co. Ltd., Rohtas Industries Ltd., and the cement factory of Mysore Iron and Steel Works which is owned by the Mysore State, are independent concerns. Only two factories, viz., Chaibasa Cement Works belonging to A.C.C. and the Banjari Cement Works belonging to Kalyanpur Lime and Cement Works Ltd., are in the third category. The remaining five factories which are in the fourth category were established in 1949 or subsequent years. Four of these belonging to Shree Digvijay Cement Co. Ltd., India Cements Ltd., Travancore Cements Ltd., and Orissa Cement Ltd., are independent concerns, while one, viz., the factory at Sevalia belongs to A.C.C.

(b) The principal raw materials required for the manufacture of cement are limestone, clay and gypsum. The

Raw materials
and process of
manufacture.

process of manufacture of cement may be divided into three stages. In the first stage, limestone and clay are crushed and ground along with water. This is called

wet process. In the dry process no water is used. In the second stage, the wet or dry mixture of crushed and ground limestone and clay is calcined into clinker in a rotary kiln which is generally coal fired but sometimes oil fired. In the third stage, the clinker is ground to a fine powder and mixed with gypsum. Of the twenty-three factories, Porbandar of A.C.C., Dadri of Dalmia Dadri Cement Ltd., and the old plant at Dalmiapuram of Dalmia Cement (Bharat) Ltd., are using the dry process while the remaining factories inclu-

ding the new plant at Dalmiapuram of Dalmia Cement (Bharat) Ltd., are using the wet process.

Most of the factories use limestone quarried at the site or at a convenient distance from the factory. Travancore Cements Ltd., use shell deposits, while Dwarka Cement Works of A.C.C. and Shree Digvijay Cement Co. Ltd., use calcareous sea sand deposits. The work of quarrying limestone is generally entrusted to contractors who employ labourers and use mechanical equipment for the quarrying operations. In addition to the cost of quarrying, expenditure is incurred on the transport of the material from the quarry to the factory by railway tip-wagons or aerial ropeways. Distance of the limestone deposits from the factory, therefore, has an important bearing on the cost of the raw material. In the case of some factories such as A.C.C. factories at Sevalia, Lakheri and Khalari, the deposits of limestone are of low grade and the installation of a floatation plant is found necessary for the beneficiation of limestone. Suitable clay is found generally close to the factory and the supplies are ample. Gypsum is found in large quantities in Badwasi and Bikaner in Rajasthan, Kundla and Bhatia in Saurashtra, and Tiruchirappally and Ramanathapuram in Madras. Even though the gypsum required does not exceed 5 per cent. of the quantity of cement produced, the freight on gypsum is an appreciable item in cost as it has to be transported from long distances.

(c) The principal sources of coal are the coalfields of Bengal and Bihar and the collieries in Vindhya Pradesh, Fuel. Pench Valley in Madhya Pradesh, and Singareni in

Hyderabad. An important item in the cost of coal is the freight charge which varies according to the distance of the factory from the coalfields. Some of the factories in Bihar and Madhya Pradesh are favourably situated in this respect, whereas factories in the North, West and South are situated at long distances from the coalfields. Some of the factories like Dwarka Cement Works, Travancore Cement Works, India Cement Works, and Sika Cement Works had installed equipment for using fuel oil but, due to the increased

price of fuel oil, had to change over to coal-firing equipment for their kilns. For power production, an inferior type of coal can sometimes be used, but the coal used in the kilns must contain the lowest possible percentage of ash; and for this reason, at least 50 per cent. of the coal has to be obtained from Bengal and Bihar coalfields.

(d) The principal market for cement before the war was to be found in important ports and large industrial centres.

During the war, cement was largely used for Government works such as houses, roads, aerodromes, factory buildings, etc., and the annual consumption rose to about 2 million tons per annum. During the post-war years also, the annual consumption continued to be high due partly to the backlog of pent-up civilian demand and partly to extensive government works for the housing of displaced persons. The use of cement is gradually becoming popular in rural areas also, and the consumption of cement in 1949-50 and 1950-51 was at the rate of 2.6 million tons per annum. During 1951-52 the actual consumption is stated to be about 3.35 million tons, of which Government offtake is estimated at about 40 per cent. As regards the future demand for cement, A.C.C. in their memorandum submitted to us, have estimated it at 3.65 million tons in 1952-53, 3.8 million tons in 1953-54, and 3.9 million tons in 1954-55. The Planning Commission, after taking into account the requirements of cement for multi-purpose projects and the development of roads, have estimated the total demand for cement to increase to about 4.5 million tons by 1955-56. During the discussions we held with the representatives of the cement industry, the consensus of opinion was that the total demand for cement is steadily increasing and that, having regard to the several big projects under execution by the Central and State Governments for which cement is required, an increase of about 10 per cent. per annum in the demand may be assumed for the next three years.

5. (a) We considered it necessary to investigate the cost of production of all the cement factories in India.

Scope and method of
cost investigation.

In the case of A.C.C., however, out of eleven factories owned by them, we selected six factories situated at

Kynmore in Madhya Pradesh, Lakheri in Rajasthan, Banmore in Madhya Bharat, Dwarka and Porbandar in Sourashtra and Sevalia in Bombay, as representative of the entire group of their factories for the purpose of cost investigation. The practice followed by A.C.C. is to calculate the works costs of cement for each factory excluding bonus and depreciation. These two items of cost are added by the Company for all the factories at a flat average rate per ton. The method followed by our Cost Accounts Officer in respect of A.C.C. factories was, therefore, to ascertain the works cost of cement for each of the costed factories for the year ended 31st July, 1952 and to work out the weighted average cost for all the factories. To the weighted average cost thus arrived at were added the costs towards depreciation, administrative expenses, selling and distribution charges and railway freight at a flat average rate for all the A.C.C. factories in India.

The names of the factories which have been costed and the latest period for which costs have been worked by the Cost Accounts Officers attached to the Commission are given in Appendix V. Estimates of costs have been prepared for the year 1953.

(b) As cement is produced by grinding clinker and mixing gypsum with it the allocation of most of the expenses has been made by the Cost Accounts Officers on the basis of the equated quantity of cement in terms of clinker production. The expenses of cement grinding mill have, however, been allocated on the basis of the actual quantity of cement ground. The figures given in column 5 of Appendix V show the equated quantity of cement in terms of clinker.

(c) As the packing charges for cement are being fixed by Government separately with effect from 1st June, 1951, we decided to exclude packing charges from the scope of cost investigation. Costs have been accordingly determined or estimated in respect of naked cement on f.o.r. destination basis.

* 6. (a) Statements showing the actual and estimated works costs of naked cement of the six factories of A.C.C. and the twelve factories outside A.C.C. are given in Appendices V and VI. Cost reports submitted by the Cost Accounts Officers attached to the Commission are being forwarded as confidential enclosures to this Report *.

We give below brief comments on the salient features of A.C.C. factories costed by us.

(1) *Kymore Cement Works:-* This is the biggest factory with an annual capacity of 350,000 tons. The actual production of cement in the year ended 31st July, 1952, was 359,040 tons. The cost of raw materials is low. The cost of coal for the kiln and power is Rs. 9.98 per ton. The total works cost is the lowest of all the factories viz., Rs. 24.18 per ton.

(2) *Lakheri Cement Works:-* The capacity of the factory has been recently increased to 350,000 tons per year. This capacity cannot, however, be attained as the quality of limestone is not satisfactory and there is water shortage during summer months. The actual production during the year ended 31st July, 1952, was only 260,424 tons. The cost of raw materials is low. The cost of coal for the kiln and power at Rs. 12.10 per ton is relatively high. The total works cost is Rs. 29.75 per ton.

(3) *Bannore Cement Works:-* This is one of the smallest factories with only one kiln and having an annual capacity of 60,000 tons. The actual production during the year ended 31st July, 1952, was 60,933 tons. Limestone is

obtained from a distance of 35 to 40 miles with the result that the cost of limestone including railway freight is Rs. 11.17 per ton. The cost of coal for the kiln and power is Rs. 12.95 per ton. The cost of labour per ton is high owing to small production. The total works cost is Rs. 40.84 per ton.

(4) *Dwarka Cement Works:-* The capacity of this factory is 210,000 tons per year. The actual production during the year ended 31st July, 1952, i.e., before expansion, was 157,778 tons. There are three kilns of which two are coal fired and one is oil fired. The cost of sea sand is very low being Rs. 0.99 per ton. The cost of coal and oil is very high being Rs. 22.79 per ton. The total works cost is Rs. 38.75 per ton.

(5) *Porbandar Cement Works:-* This is the oldest and smallest of all the factories owned by A.C.C. The present capacity is 36,000 tons per year and production during the year ended 31st July, 1952, was 34,934 tons. The cost of limestone, sand and clay is Rs. 9.35 per ton. The cost of coal for the kiln and power is high being Rs. 16.79 per ton. The cost of labour is very high owing to small production. The total works cost is Rs. 49.80 per ton.

(6) *Sevalia Cement Works:-* This is the latest cement factory put up by A.C.C. It came into production in the second quarter of 1951. The annual capacity of this factory is 200,000 tons, but production during the year ended 31st July, 1952, was 131,534 tons. Limestone is obtained from a distance of 15 miles from the factory and its cost is Rs. 11.39 per ton. As the quality of limestone is not of a uniform type, it is proposed by the Company to put up a floatation plant for beneficiation of limestone. The cost of coal for the kiln and power is Rs. 12.12 per ton. The total works cost is Rs. 39.57 per ton.

The total production of cement of the six factories of A.C.C. mentioned above for the year ended 31st July, 1952, was 1,004,643 tons. As coal from the Company's collieries

at Nowrazabad and Kotma is supplied to some of the factories at controlled prices which are higher than the average rail head cost, adjustments have been made for such over recoveries. After this adjustment the weighted average works cost of these six factories for the year ended 31st July, 1952, works out to Rs. 31.20 per ton.

(b) *Head office expenses and gratuity:-* The head office expenses per ton of cement produced in India by A.C.C. factories for the year ended 31st July, 1952, work out to Rs. 1.79 per ton of cement. There is a system of paying gratuity to their staff equal to half of a month's salary for each completed year of service. A provision of Rs. 4.93 lakhs per annum being 50 per cent. of the total monthly wages and salaries of the staff drawing a salary of Rs. 500 or less per month has been made. This comes to Rs. 0.26 per ton of cement. We have not allowed gratuity in respect of employees drawing a salary of more than Rs. 500 per month as they are already receiving provident fund and other benefits which are substantial. To the weighted average cost of Rs. 31.20 per ton of these six factories, additions on account of the above two items have been made to arrive at the works cost of Rs. 33.25 per ton which may be taken to represent the works cost of A.C.C. as a whole in India for a production of 17.60 lakh tons. This works cost is shown in Appendix VI under the following heads:-

| | |
|--------------------------------|-------------------|
| Raw materials .. | Rs. 6.96 per ton |
| Power and fuel .. | Rs. 13.24 " " |
| Other manufacturing charges .. | Rs. 13.05 " " |
| <hr/> | |
| Total | Rs. 33.25 per ton |

(c) In order to arrive at the final cost of naked cement f.o.r. destination, additions have to be made to the above works cost on account of (i) depreciation, (ii) selling and distribution expenses and (iii) railway freight.

(i) *Depreciation:-* Depreciation has been calculated on the written down values according to the income-tax rates for the first and second shifts. The amount of depreciation was Rs. 79.50 lakhs for all the factories of A.C.C. including those in Pakistan. When spread over the total production of 20.756 lakh tons including the factories in Pakistan, the cost of depreciation comes to Rs. 3.83 per ton.

(ii) *Selling and distribution expenses:-* The Cement Marketing Company of India Ltd., (C.M.I.) are the sole selling agents of A.C.C. They are a subsidiary of the latter. In addition to selling A.C.C. cement, C.M.I. sell cement produced by Patiala Cement Company Ltd. The expenditure of C.M.I. including that of the Concrete Association of India and publicity sections for the year ended 31st July, 1952, amounts to Rs. 48.81 lakhs in India. When spread over sales of cement of 20,09 lakh tons in India including those of Patiala Cement Co. Ltd., the selling and distribution expenses work out to Rs. 2.43 per ton. In addition to this, the commission paid to stockists works out to Rs. 0.50 per ton. The total selling and distribution expenses thus amount to Rs. 2.93 per ton.

(iii) *Railway freight:-* The average weighted railway freight differential for the year ended 31st July, 1952, works out to Rs. 15.01 per ton.

After making necessary additions for the above three items the cost of naked cement f.o.r. destination for the production of 17.601 lakh tons in India for A.C.C. as a whole for the year ended 31st July, 1952, is as follows:

| | |
|--------------------------|----------------------------|
| <u>Actual production</u> | .. <u>17.601 lakh tons</u> |
| Materials | .. Rs. 6.96 per ton |
| Manufacturing charges | .. Rs. 26.29 " " |
| | <u>Rs. 33.25 per ton</u> |
| Depreciation | .. <u>Rs. 3.83 " "</u> |

| | |
|--|-------------------------|
| Factory cost of naked cement. | ..Rs.37.08 per ton |
| Selling and distribution expenses | ..Rs. 2.83 " " |
| Average railway freight | Rs.15.01 " " |
| * Total cost of naked cement f.o.r. destination. | <u>Rs.55.02 per ton</u> |

7. In estimating the works costs for 1953, we have taken 10.8 lakh tons as the estimated production for 1953 of the six factories of A.C.C. which were costed by our Cost Accounts Officer. This represents an increase in production of about 7.5 per cent. as compared with the year ended 31st July, 1952. The all-India estimate of production by the Company for the year ending 31st July, 1953, is 18.53 lakh tons showing an increase of about 6 per cent. over the preceding year. We have adopted the weighted average consumption of the various materials per ton for the preceding three years with slight adjustments. We have allowed an increase in labour cost due largely to annual increments to the workers. A small increase has also been allowed in the prices of stores over the level of prices for the year ended 31st July, 1952. Based on the general increase in the level of wages, the labour element in the cost of the Company's own material, e.g., limestone, has been adjusted and in the case of other materials like gypsum the latest average works cost for December, 1952, has been adopted. Adjustments have been made for increase in railway freight in estimating the cost of coal per ton of cement as well as the cost of oil. Provision has been made for provident fund for daily paid employees under the Government

*This is, strictly speaking, "Total cost, plus distribution and selling expenses, of naked cement f.o.r. destination" and in all subsequent references in this Report, the expression 'Total cost of naked cement f.o.r. destination' is to be understood as such.

Scheme and contribution towards the Health Insurance Scheme. We have provided for contingencies at the rate of Rs. 1-8-0 per ton.

On the above basis the estimated works cost of naked cement for the six selected factories of A.C.C. works out to Rs. 37.35 per ton inclusive of Rs. 1.82 per ton on account of head office expenses. Additions have to be made to this estimate for depreciation, selling and distribution expenses and average railway freight to arrive at the estimate of cost of naked cement f.o.r. destination. A.C.C. expect to add about Rs. 119 lakhs to the fixed investment during the year ending 31st July, 1953. Including this new addition, the total depreciation on written down values according to the Income-tax rates for the first and second shifts estimated for 1953 will be Rs. 83.88 lakhs. When spread over the estimated production of A.C.C. factories including that for factories in Pakistan, the depreciation works out to Rs. 3.85 per ton. For commission to stockists we have allowed the claim of the Company for an average rate of Re. 0.44 per ton as reasonable. Selling and distribution expenses have been estimated at Rs. 2.50 per ton. The weighted average of railway freight for the three years ended 31st July, 1952, works out to Rs. 15.88 per ton but we consider it fair to adopt a rate of Rs. 15 per ton as against Rs. 15.50 per ton claimed by the Company.

The estimated cost per ton of naked cement f.o.r. destination thus works out to Rs. 59.14 for all A.C.C. factories in India. The estimates of production and of principal items of cost for 1953 are shown in the statement below:

| | | |
|-----------------------|-----|-------------------|
| Estimated production: | | 18.530 lakh tons |
| Materials | ... | Rs. 7.34 per ton |
| Manufacturing charges | | Rs. 30.01 " " |
| Total | | Rs. 37.35 per ton |

| | |
|--|-------------------|
| Depreciation ... | Rs. 3.85 " " |
| Factory cost of naked cement ... | Rs. 41.20 per ton |
| Selling and distri- bution expenses ... | Rs. 2.94 " " |
| Average railway freight | Rs. 15.00 " " |
| Estimated cost of naked cement f.o.r. destination | Rs. 59.14 per ton |

8. We have examined the actual and estimated works costs of A.C.C. factories in paragraphs 6 and 7 above. The salient features of the costs of other factories are stated below. Estimates of costs of these factories for 1953 have been made on the basis of the actual costs for the latest period for which cost investigation was carried out by our Cost Accounts Officers. Depreciation has been allowed at the usual income-tax rates in working out the actual costs as well as in estimating costs for 1953. We have made a provision for increase in labour cost on account of annual increments, etc., and for contingencies at at Rs. 1-8-0 per ton. We have also taken into account the increase in railway freight and made provision for provident fund for daily paid employees under the Government Scheme and for contribution towards the Health Insurance Scheme in estimating costs for 1953.

(1) *Patiala Cement Co. Ltd., Pepsu*:- The Company are a subsidiary of A.C.C. who hold the major portion of their shares. The annual capacity of the factory is 300,000 tons. The cost of limestone is low being Rs. 3.40 per ton but the cost of coal for the kiln and power is somewhat high being Rs. 12.46 per ton. The following statement shows the principal elements of actual cost for the nine months ended 31st December, 1952, and of estimated cost for 1953:

| | | <i>Actuals for nine months ending 31st December 1952</i> | <i>Estimate for 1953</i> |
|--|----|--|------------------------------|
| Production: | .. | 2.15 lakh tons | 2.75 lakh tons |
| | | Rs. | Rs. |
| Materials | .. | 4.87 per ton | 4.99 per ton |
| Manufacturing charges | | 23.86 " " | 25.68 " " |
| Total | | 28.73 per ton | 30.67 per ton |
| Depreciation | .. | 3.67 " " | 3.65 " " |
| Factory cost of naked cement | .. | 32.40 per ton | 34.32 per ton |
| Selling and distribu- tion expenses | .. | 2.93 " " | 2.94 " " |
| Average freight | .. | 10.57 " " | 10.57 " " |
| Total cost of naked cement f.o.r. desti- nation. | | 45.90 per ton | 47.83 per ton |

(2) *Dalmia Dadri Cement Ltd., Dalmia Dadri:-* The annual capacity of the factory is 60,000 tons. Owing to the favourable situation of the factory the cost of limestone is low being Rs. 4.32 per ton. The cost of coal for the kiln and power is Rs. 10.84 per ton. Consumption of coal for the kiln is lower as the dry process is used for the manufacture of cement. The principal elements of actual cost for the eleven months ended 30th November, 1952 and of estimated cost for 1953 are shown in the following statement:

| | | <i>Actuals for eleven months ended 30th November, 1952.</i> | <i>Estimate for 1953.</i> |
|-----------------------|-----|---|-------------------------------|
| Productions: | ... | 0.542 lakh tons | 0.60 lakh tons |
| | | Rs. | Rs. |
| Materials | ... | 5.95 per ton | 5.95 per ton |
| Manufacturing charges | | 25.60 " " | 28.20 " " |
| Total | | 31.55 per ton | 34.15 per ton |

| | | | |
|---|-----|---------------|---------------|
| Depreciation | ... | 2.37 " " | 2.00 " " |
| Factory cost of naked cement | ... | 33.92 per ton | 36.15 per ton |
| Selling and distribution expenses | ... | 3.00 " " | 3.00 " " |
| Average freight | ... | 10.70 " " | 10.70 " " |
| Total cost of naked cement f.o.r. destination | | 47.62 per ton | 49.85 per ton |

(3) *Dalmia Cement (Bharat) Ltd., Dalmiapuram* :- The annual capacity of the factory is 250,000 tons. The cost of limestone is low being Rs. 3.85 per ton. The cost of coal for the kiln for the year 1952 is somewhat high, being Rs. 11.90 per ton. This is due to the fact that some of the coal has to be obtained by the sea-cum-rail route the freight for which is higher than for the all-rail route. Power is supplied by the Hydro Electric Power System in South India and the supply is liable to be reduced if the lake level is not satisfactory owing to deficiency of rainfall. The following statement shows the principal elements of actual cost for 1952 and of estimated cost for 1953:

| | Actuals for the year 1952. | Estimate for 1953. |
|---|-------------------------------|-----------------------|
| Production: | 2.27 lakh tons | 2.25 lakh tons |
| | Rs. | Rs. |
| Materials | 5.37 per ton | 6.01 per ton |
| Manufacturing charges | 27.20 " " | 31.44 " " |
| Total | 32.57 per ton | 37.45 per ton |
| Depreciation | 4.64 " " | 4.18 " " |
| Factory cost of naked cement | 37.21 per ton | 41.63 per ton |
| Selling and distribution expenses | 3.16 " " | 3.18 " " |
| Average freight | 12.20 " " | 12.20 " " |
| Total cost of naked cement f.o.r. destination | 52.57 per ton | 57.01 per ton |

(4) *Rohtas Industries Ltd., Dalmianagar*: - Rohtas Industries Ltd. are running several concerns such as paper, cement and sugar factories. The annual capacity of the cement factory is 350,000 tons. The cost of limestone which is obtained from quarries situated at a distance of 27 miles from the factory is very high, being Rs. 16.18 per ton. The cost of coal is Rs. 6.08 per ton. The Company's own plant supplies power to the cement factory as well as to other factories. The general office, the colony for workers, workshops, stores, etc., are common for all the concerns. The cost under labour and establishment includes wages and salaries of a portion of the staff employed in common departments which render service to all sections of the Company. Thirty per cent. of the common expenditure incurred for general administration has been allocated to the cement factory. For 1953 we have estimated a lower production of 30,000 tons as one of the cement mills is not working to capacity owing to certain defects and the overhaul of the old plant is considered necessary. The principal elements of actual cost for the year ended 31st October, 1952, and of estimated cost for 1953 are shown in the statement below:

| | <u>Actuals for the year ended 31st October, 1952.</u> | <u>Estimate for 1953.</u> |
|---|---|-------------------------------|
| Production: .. | 3.33 lakh tons | 3.00 lakh tons |
| | Rs. | Rs. |
| Materials .. | 18.26 per ton | 18.43 per ton |
| Manufacturing charges | 19.50 " " | 23.33 " " |
| Total | 37.76 per ton | 41.76 per ton |
| Depreciation .. | 3.24 " " | 3.15 " " |
| Factory cost of naked cement. .. | 41.00 per ton | 44.91 per ton |
| Selling and distribu- tion expenses. | 3.00 " " | 3.00 " " |

| | | |
|---|----------------------|----------------------|
| Average freight .. | 15.38 per ton | 15.38 per ton |
| Total cost of naked cement f.o.r. destination. .. | <u>59.38 per ton</u> | <u>63.21 per ton</u> |

(5) *Sone Valley Portland Cement Co. Ltd., Jopla:-*
The annual capacity of the factory is 250,000 tons. The machinery is old, some of it having been installed twenty five years ago. The limestone quarries which are owned by the Company are situated across the river Sone at a distance of five miles along the bank of the river and the limestone is carried to the factory by means of a ropeway. Blast furnace limestone obtained from the Indian Iron and Steel Co. Ltd., is also used. The cost of limestone is very high being Rs. 14.25 per ton. The cost of coal for the kiln is Rs. 7.53 per ton. The principal elements of actual cost for the year ended 31st December, 1952, and of estimated cost for 1953 are shown in the statement below:

| | <u>Actuals for the year ended 31st December, 1952.</u> | <u>Estimate for 1953.</u> |
|---|--|---------------------------|
| Production: .. | 2.295 lakh tons | 2.350 lakh tons |
| | Rs. | Rs. |
| Materials .. | 17.26 per ton | 16.45 per ton |
| Manufacturing charges | 25.10 " " | 26.73 " " |
| Total | <u>42.36 per ton</u> | <u>43.18 per ton</u> |
| Depreciation .. | <u>1.67 " "</u> | <u>1.49 " "</u> |
| Factory cost of naked cement. .. | 44.03 per ton | 44.67 per ton |
| Selling and distribution expenses. | 1.75 " " | 1.75 " " |
| Average freight .. | 14.94 " " | 14.94 " " |
| Total cost of naked cement f.o.r. destination. .. | <u>60.72 per ton</u> | <u>61.36 per ton</u> |

(6) *Kalyanpur Lime and Cement Works Ltd., Banjari*:- This is a small factory with an annual capacity of 36,000 tons. Although the limestone quarries are situated near the factory, the cost of limestone is Rs. 8.97 per ton as there is a heavy overburden. The cost of coal for the kiln and power is high being Rs. 12.89 per ton. Labour and establishment charges are high owing to small production. The principal elements of actual cost for the year ended 31st December, 1952, and of estimated cost for 1953 are shown in the following statement:-

| | Actuals for the year ended 31st December 1952. | Estimate for 1953. |
|---|--|------------------------|
| Production: | 0.343 lakh tons | 0.340 lakh tons |
| | Rs. | Rs. |
| Materials ... | 8.86 per ton | 9.00 per ton |
| Manufacturing charges | 33.51 " " | 34.55 " " |
| Total | 42.37 per ton | 43.55 per ton |
| Depreciation ... | 3.36 " " | 3.00 " " |
| Factory cost of naked cement. | 45.73 per ton | 46.55 per ton |
| Selling and distri- bution expenses. | 2.50 " " | 2.50 " " |
| Average freight ... | 14.04 " " | 14.04 " " |
| Total cost of naked cement f.o.r. desti- nation. | 62.27 per ton | 63.09 per ton |

(7) *Andhra Cement Company Ltd., Vijayawada*:- The annual capacity of the factory is 105,400 tons. The cost of limestone is high being Rs. 10.60 per ton, as it has to be brought from a distance of 78 miles from the factory. The cost of coal for the kiln is Rs. 8.90 per ton. The cost of power which is obtained from the Andhra Power System of the Madras Government is Rs. 5.06 per ton. The principal elements of actual cost for 1952 and of estimated cost for 1953 are given below:-

| | <u>Actuals for the year 1952.</u> | <u>Estimate for 1953.</u> |
|--|---------------------------------------|-------------------------------|
| Production: | 0.950 lakh tons | 0.948 lakh tons |
| | Rs. | Rs. |
| Materials ... | 13.58 per ton | 14.47 per ton |
| Manufacturing charges | 28.49 " " | 33.12 " " |
| Total | 42.07 per ton | 47.59 per ton |
| Depreciation ... | 7.27 " " | 6.54 " " |
| Factory cost of naked cement. | 49.34 per ton | 54.13 per ton |
| Selling and distri- bution expenses... | 1.09 " " | 1.39 " " |
| Average freight ... | 7.41 " " | 7.41 " " |
| Total cost of naked cement f.o.r. desti- nation. ... | 57.84 per ton | 62.93 per ton |

(8) *The Mysore Iron and Steel Works, Bhadravati:-* These works owned by the Government of Mysore State, produce chiefly iron and steel and the manufacture of cement is one of their important subsidiary activities. The annual capacity of the old plant installed in 1938 is 19,200 tons and of the new plant installed in 1951, 64,000 tons. The limestone quarries are situated at a distance of 16 miles from the factory with the result that the cost of limestone is high, being Rs. 10.45 per ton. The cost of coal at Rs. 12.42 per ton is also high, as coal has to be obtained from long distances. The common overhead charges have been allocated to the cement factory according to the operation costs of the different products of the entire works, and in the estimate of cost for 1953 a small portion of the administration charges incurred at the headquarters has been also allowed. The principal elements of actual cost for six months from 1st April, 1952 to 30th September, 1952, and of estimated costs for 1953 are shown in the following statement:-

| | <u>Actuals for 1st April to Sep- tember, 1952.</u> | <u>Estimate for 1953</u> |
|--|--|------------------------------|
| Production: | 0.408 lakh tons Rs. | 0.750 lakh tons Rs. |
| Materials ... | 12.67 per ton | 13.55 per ton |
| Manufacturing charges | 31.07 " " | 33.22 " " |
| Total | 43.74 per ton | 46.77 per ton |
| Depreciation ... | 8.78 " " | 8.64 " " |
| Factory cost of naked cement. ... | 52.52 per ton | 55.41 per ton |
| Selling and distri- bution expenses. | 1.97 " " | 2.00 " " |
| Average freight ... | 11.59 " " | 11.59 " " |
| Total cost of naked cement f.o.r. destination. ... | 66.08 per ton | 69.00 per ton |

(9) *Shree Digvijay Cement Company Ltd., Sika:-* The annual capacity of the factory is 115,000 tons. In addition to a small quantity of limestone, sea sand collected from islands at a distance of about 8 miles from the sea-shore is used. The cost of sea sand is Rs. 3.35 per ton. The cost of coal for the kiln is high, being Rs. 11.92 per ton. The cost of power at Rs. 11.45 per ton is also high. The principal elements of actual cost for 1952 and of estimated cost for 1953 are given below:-

| | <u>Actuals for 1952.</u> | <u>Estimate for 1953.</u> |
|-----------------------|------------------------------|-------------------------------|
| Production: | 1.177 lakh tons Rs. | 1.047 lakh tons Rs. |
| Materials ... | 8.44 per ton | 9.61 per ton |
| Manufacturing charges | 37.57 " " | 40.66 " " |
| Total | 46.01 per ton | 50.27 per ton |
| Depreciation | 7.79 " " | 8.86 " " |

| | | |
|--|----------------------|----------------------|
| Factory cost of naked cement ... | 53.80 per ton | 58.13 per ton |
| Selling and distri- bution expenses... | 2.61 " " | 2.50 " " |
| Average freight ... | <u>13.46 " "</u> | <u>13.46 " "</u> |
| Total cost of naked cement f.o.r. desti- nation. ... | <u>69.87 per ton</u> | <u>74.09 per ton</u> |

(10) *India Cements Ltd., Talaiyuthu:-* The annual capacity of the factory is 100,000 tons. The cost of limestone is Rs. 8.34 per ton as one of the quarries is situated at a distance of 42 miles from the factory. The cost of coal for the kiln is high being Rs. 11.51 per ton. The cost of power which is obtained from the Government of Madras is Rs. 2.81 per ton. The principal elements of actual cost for the period from 1st April, 1952 to 30th November, 1952, and of estimated cost for 1953 are given in the following statement:-

| | <u>Actuals for 1st April to Novem- ber, 1952.</u> | <u>Estimate for 1953.</u> |
|--|---|-------------------------------|
| <i>Production:</i> | <i>0.719 lakh tons</i> | <i>0.900 lakh tons</i> |
| | <i>Rs.</i> | <i>Rs.</i> |
| Materials ... | 10.55 per ton | 11.44 per ton |
| Manufacturing charges | <u>26.99 " "</u> | <u>37.24 " "</u> |
| Total | 37.54 per ton | 48.68 per ton |
| Depreciation ... | <u>8.69 " "</u> | <u>9.79 " "</u> |
| Factory cost of naked cement. ... | 46.23 per ton | 58.47 per ton |
| Selling and distri- bution expenses. | 1.47 " " | 1.65 " " |
| Average freight ... | <u>12.16 " "</u> | <u>12.16 " "</u> |
| Total cost of naked cement f.o.r. desti- nation. ... | <u>59.86 per ton</u> | <u>72.28 per ton</u> |

(11) *Orissa Cement Ltd. Rajagangpur :-* The annual capacity of the factory is 165,000 tons. The cost of limestone which is obtained from the quarries situated at a distance of 8 miles is Rs. 8.78 per ton. More labour charges have to be incurred as clay and earth with which limestone is mixed have to be separated from it by hand. The cost of coal is Rs. 7.01 per ton. The cost of power which is supplied by the Orissa Government is high, being Rs. 8.98 per ton. The principal elements of actual cost and of estimated cost are given below:-

| | <u>Actuals for 1st January to 31st October, 1952.</u> | <u>Estimate for 1953.</u> |
|--|---|-------------------------------|
| Production: ... | 1.064 lakh tons | 1.350 lakh tons |
| | Rs. | Rs. |
| Materials ... | 10.88 per ton | 12.49 per ton |
| Manufacturing charges | 28.26 " " | 32.98 " " |
| Total | 39.14 per ton | 45.47 per ton |
| Depreciation ... | 15.73 " " | 13.22 " " |
| Factory cost of naked cement. ... | 54.87 per ton | 58.69 per ton |
| Selling and distri- bution expenses. ... | 1.50 " " | 1.50 " " |
| Average freight ... | 17.38 " " | 17.38 " " |
| Total cost of naked cement f.o.r. desti- nation. ... | 73.75 per ton | 77.57 per ton |

(12) *Travancore Cements Ltd., Kottayam:-* The annual capacity of the factory is 50,000 tons. Instead of limestone, mussel shells extracted from the bottom of Vembanad lake by a suction dredger are used. They are transported to the factory in barges from a distance of about 14 miles. The cost of shells is Rs. 7.35 per ton. Upto the middle of 1952, oil was used instead of coal but as the price of oil rose very high coal is since being used. Saving is expected

to accrue in the fuel cost due to the change-over from oil firing to coal firing. The cost of coal and oil for the period from 1st January, 1952 to 30th November, 1952, is Rs. 10.90 and 12.86 per ton, respectively. The principal elements of actual cost for the above period and estimated cost for 1953 are given in the following statement:-

| | <u>Actuals for 1st January to 30th November, 1952.</u> | <u>Estimate for 1953.</u> |
|--|--|-------------------------------|
| Production: | 0.400 lakh tons | 0.450 lakh tons |
| | Rs. | Rs. |
| Materials | 10.32 per ton | 11.34 per ton |
| Manufacturing charges | 50.57 " " | 49.57 " " |
| Total | 60.89 per ton | 60.91 per ton |
| Depreciation | 19.82 per ton | 17.44 per ton |
| Factory cost of naked cement. | 80.71 per ton | 78.35 per ton |
| Selling and distri- bution expenses | 0.25 per ton | 0.24 per ton |
| Average freight | | |
| Total cost of naked cement f.o.r. desti- nation. | 80.96 per ton | 78.59 per ton |

9. We have calculated the working capital on the basis of five months' cost of production and allowed interest at the rate of 4½ per cent. per annum on this amount. After careful consideration, we have decided to allow a return of 10 per cent. on block inclusive of any bonus that may be paid.

10. The following statement gives the price per ton of naked cement f.o.r. destination as estimated by us for 1953 of A.C.C. factories and other factories, inclusive of interest on working capital and return on block:-

Price of naked
cement f.o.r.
destination.

| Name of the Company | Total cost f.o.r. destination | Interest on Working capital | Return on Block | Estimated f.o.r. destination price |
|--|-------------------------------|-----------------------------|-----------------|------------------------------------|
| | Rs. | Rs. | Rs. | Rs. |
| 1. A.C.C. | 59.14 | 1.01 | 7.92 | 68.07 |
| 2. Patiala Cement Company Ltd. | 47.83 | 0.87 | 5.75 | 54.45 |
| 3. Dalmia Dadri Cement Company Ltd. | 49.85 | 0.92 | 6.34 | 57.11 |
| 4. Dalmia Cement (Bharat) Ltd. | 57.01 | 1.06 | 6.91 | 64.98 |
| 5. Rchtas Industries Ltd. | 63.29 | 1.07 | 6.56 | 70.92 |
| 6. Sonevalley Portland Cement Company Ltd. | 61.36 | 1.14 | 6.25 | 68.75 |
| 7. Kalyanpur Lime and Cement Company Ltd., | 63.09 | 1.08 | 6.02 | 70.19 |
| 8. Andhra Cement Company Ltd. | 62.93 | 1.12 | 7.17 | 71.22 |
| 9. Mysore Iron and Steel Works. | 69.00 | 1.15 | 13.26 | 83.41 |
| 10. Shree Digvijay Cement Company Ltd. | 74.09 | 1.17 | 11.13 | 86.39 |
| 11. India Cements Ltd. | 72.28 | 1.22 | 14.18 | 87.68 |
| 12. Orissa Cement Ltd. | 77.57 | 1.13 | 12.36 | 91.06 |
| 13. Travancore Cements Ltd. | 78.59 | 1.43 | 22.68 | 102.70 |

11. The manufacture of cement is a continuous process involving heavy strain to the plant, machinery and equipment. Careful attention is needed to ensure that replacement and rehabilitation are undertaken in proper time. Modernisation and expansion are also necessary to increase efficiency and

Special allowance
for rehabilitation,
modernisation and
expansion.

production. A.C.C. have submitted to us a 10-year programme which includes besides replacement, rehabilitation, modernisation and expansion, mechanisation of the quarries as well as construction and improvement of houses for their labour staff, etc. The cost of the programme is estimated at Rs. 18.37 crores, excluding the cost of a new plant at Sindri, or about Rs. 184 lakhs per annum. A.C.C. have already been spending annually large sums for replacement and rehabilitation, but as some of the factories are very old, rehabilitation and modernisation are necessary on a more extensive scale than before. They also find it necessary to carry out expansion of some of their factories. If the programme is implemented by A.C.C., the capacity of the existing factories is expected to increase from 21.3 lakh to 26.3 lakh tons at the end of 10 years giving an average capacity of 23.8 lakh tons per annum during the period of 10 years. When spread over the annual average capacity of 23.8 lakh tons, the annual rehabilitation expenditure will amount to Rs. 7.73 (184 lakhs divided by 23.8 lakhs) per ton. Having regard to the resources at present available to them and the present conditions in the capital market, we consider that A.C.C. should be enabled to allocate adequate amount to their reserves for financing their 10-year programme of rehabilitation, modernisation and expansion. We consider that a rate of Rs. 7.73, or, say, Rs. 7-12-0 per ton, should be allowed to cover the cost of replacement, rehabilitation, modernisation, expansion, etc. This allowance will be inclusive of Rs. 3.85 per ton for depreciation already allowed by us. We, however, recommend that the allowance of Rs. 7-12-0 per ton after payment of income-tax thereon should be set aside annually for implementation of the programme of

rehabilitation, modernisation and expansion and no part of it should be utilised for any other purpose. A.C.C. have agreed to this stipulation.

We have also received information from some of the other companies regarding their programme of rehabilitation, modernisation and expansion. According to these programmes increase in capacity is contemplated at the factories of Dalmia Dadri Cement Ltd., Shree Digvijay Cement Co. Ltd., Kalyanpur Lime and Cement Works Ltd., and Andhra Cement Co. Ltd. It is also proposed to increase the capacity of the cement factory of Mysore Iron and Steel Works from 83,200 tons to 90,000 tons by 1955-56. Rohtas Industries Ltd., and Sone Valley Portland Cement Co. Ltd., have also programmes of rehabilitation and modernisation. We consider that it is important that all companies other than A.C.C. for which no extra price is recommended by us should also set aside annually for rehabilitation, modernisation and expansion, an amount per ton equal to the difference between Rs. 72, viz., the price of naked cement per ton recommended by us in paragraph 12 below, and the f.o.r. destination price shown in the last column of the statement in paragraph 10 above, subject to a maximum amount of Rs. 3.88 per ton and that no part of it should be utilised for any other purpose. The units for which an extra price is recommended by us will have to finance any expansion projects they consider necessary out of such resources as may be available to them from the extra price.

12. It will be seen that the estimated price of naked cement manufactured by A.C.C. on f.o.r. destination basis works out to Rs. 71.95, or say, Rs. 72 per ton. Basic price for cement. (Rs. 68.07 f.o.r. destination price plus Rs. 3.88 being the balance of depreciation and rehabilitation allowance). In the past, the price of cement was fixed by Government on the basis of costs of A.C.C. factories as these were considered to be representative of the industry from the point of view of location, production, costs and efficiency. The representative character of the

group of factories belonging to A.C.C. has remained unchanged inspite of the establishment of new factories in different parts of India. Although there are variations in costs of production of the factories belonging to A.C.C. and other companies, we consider that the basic price for all the units should be fixed on the basis of the price of cement produced by A.C.C. as estimated by us. We, therefore, recommend that the basic price of naked cement should be fixed at Rs. 72 per ton f.o.r. destination.

13. We have already mentioned in paragraph 4(d) that the overall demand for cement is higher than the total production in the country. It is, therefore, essential that factories whose cost of production is high should be able to maintain their production. We consider that if an extra price is allowed to the high cost units for a limited period, it would enable them to lower their costs by providing adequate depreciation now and thereby avoiding the heavy capital charges in later years. In their written memoranda submitted to us and also during the course of their discussion with us, the representatives of the companies whose costs of production are high represented to us that their case should be distinguished from that of other companies on the ground that their capital cost is much higher than that of other companies. Capital cost of Shree Digvijay, Orissa, Mysore, India and Travancore units comes to Rs. 101.2, Rs. 101.2, Rs. 119.6, Rs. 127.6 and Rs. 204 per ton of installed capacity, respectively, while in the case of other units, the capital cost ranged from Rs. 52.7 to Rs. 71.7 per ton installed capacity. In the case of the above five units, the depreciation charges will, therefore, be higher than in the case of other units. It would seem equitable to allow an extra price for these units for a limited period to enable them to reduce their costs. In 1949, Government had allowed an extra price of Rs. 7-8-0 per ton to Shree Digvijay, India and Travancore Companies whose factories had just then gone into production. We understand that at the present levels

of machinery prices and construction costs, the capital investment required for a new unit (including a power plant) is estimated at about Rs. 120 per ton. Allowing for the usual depreciation and return at 10 per cent. on this capital cost and taking the works cost, interest, freight and selling and distribution expenses at about Rs. 62 per ton, we estimate the price of naked cement (f.o.r. destination) for such a unit at about Rs. 80 per ton, or about Rs. 8 per ton higher than the basic price of Rs. 72 per ton recommended in paragraph 12 above. A price of Rs. 80 per ton would, however, be appreciably lower than the estimated price given in paragraph 10 above for any of the five high cost units. We carefully considered, on the one hand, the need for maintaining the price of cement for the consumer at a reasonable level and, on the other, the desirability of providing incentive to these units to lower their costs of production and we are of the view that an extra price of Rs. 8 per ton may be allowed in the case of Shree Digvijay, India, Orissa and Travancore companies, in addition to the basic price of Rs. 72 per ton. In the case of Mysore, we consider that an extra price of Rs. 5 per ton may be allowed in view of the fact that the capital cost incurred by this unit on its new plant is too high in comparison with other units which also installed additional equipment at about the same time. The extra price recommended by us would enable the high cost units to maintain their production and partially to offset their disadvantage during the period of price fixation.

14. (a) In connection with the practice of fixing packing charges by Government, it was represented to us that the method of estimating the charges on the basis of the average price of the packing material on the first day of each month during the nine months immediately preceding the day from which the charges were intended to come into force was not satisfactory. We think that it might be better if the charges are fixed on the basis of the average of the maximum and minimum price of the packing material during each week of the nine months instead of on the first day of each month.

(b) It was also represented to us that when the packing charges were fixed at Rs. 14-11-0 per ton with effect from 1st October, 1952, some of the companies were put to a great loss as they had at that time fairly large stocks of jute and paper bags purchased by them at high prices. We have not gone into this question as we consider that such loss cannot be taken into account in determining the fair price of naked cement.

15. The question of uniform price for cement was considered at the public inquiry and the consensus of opinion was that the present system of uniform price for cement f.o.r. destination price for cement throughout India should be maintained.

The possibility of the industry establishing a common marketing organisation for all the companies was discussed at the public inquiry but the general view was not in favour of such an organisation. Opinion was, however, unanimous that a common f.o.r. destination price should be fixed by Government for all the units after taking into account the basic price and the extra price if any, that may be found necessary in the case of high cost units. We consider it necessary that Government should set up a Fund from which payments could be made to the high cost units to compensate them for the loss incurred by them owing to the fixation of a common price for all units. On the basis of an extra price of Rs. 5 per ton for Mysore and an extra price of Rs. 8 per ton for other high cost units, viz., Shree Digvijay, India, Orissa and Travancore, the total amount payable to these five units for the production estimated by us for 1953 as shown in Appendix VI will be as follows:-

| | | | |
|----------------|----|-------------------------------|------------------|
| Mysore | .. | 75,000 tons @ Rs. 5 per ton: | Rs. 3.750 lakhs |
| Shree Digvijay | | 104,700 tons @ Rs. 8 per ton: | Rs. 8.376 lakhs |
| India | .. | 90,000 tons @ Rs. 8 per ton: | Rs. 7.200 lakhs |
| Orissa | .. | 135,000 tons @ Rs. 8 per ton: | Rs. 10.800 lakhs |
| Travancore | .. | 45,000 tons @ Rs. 8 per ton: | Rs. 3.600 lakhs |

Total Rs. 33.726 lakhs

This amount when spread over the entire production in India estimated by us for 1953 at 35.265 lakh tons works out to Rs. 0.95 per ton. After adding this amount of Rs. 0.95 per ton plus a small amount for expenditure that may have to be incurred for setting up the necessary organisation to the basic price of Rs. 72 per ton, one uniform price of Rs. 73 per ton could be fixed for cement throughout India on f.o.r. destination basis. Adjustments may have to be made in this price on account of payments to be made as recommended by us in paragraph 17 below to certain units whose average freight on all the despatches during a fixed period exceeds the average railway freight thereon at the rate of Rs. 15 per ton or payments to be made to new units which come into production hereafter owing to their high costs. The extra amount at the rate of Re. 1 per ton (Rs. 73- Rs. 72) will have to be collected by Government from all the units other than the five high cost units, viz., Shree Digvijay, India, Orissa, and Travancore at the rate of Rs. 7 (Rs. 8 - Re.1) per ton and to Mysore Iron and Steel Works at the rate of Rs. 4 (Rs. 5 - Re. 1) per ton on their internal sales in India during the year.

16. We recommend that the basic price of cement, viz., Rs. 72 per ton, and the extra price for high cost units as indicated by us in paragraph 12 above, should be fixed for a period of three years. This matter was discussed with the representatives of the companies at the public inquiry and they generally agreed that a period of three years would be reasonable.

17. (a) It was pointed out to us that cement from Shree Digvijay and India factories, etc., was sometimes supplied to distant places such as Bombay and Calcutta. The average railway freight included in the basic price recommended by us, viz., Rs. 15 per ton may not cover rail and sea transport charges to Bombay and Calcutta incurred by these units. In

Other matters:
extra freight
charges.

such cases, we recommend that the difference, if any, between the total amount of the freight actually incurred by high-cost units, viz., Shree Digvijay Cement Co., India Cements, Orissa Cement, Travancore Cements and Mysore Iron and Steel Works and the total amount of freight calculated at the average freight rate of Rs. 15 per ton should be paid to them at the end of the year out of the fund referred to in paragraph 15 above.

(b) It was also brought to our notice that sometimes under instructions of Cement Controllers uneconomic movements

of cement take place, that is, cement is supplied by factories which are far away from destinations when it could as well be supplied by factories which are near. We obtained information from all companies regarding their despatches of cement to the various States and to some of the principal towns in those States and from the statements furnished by them it appears that supplies of cement are made to the States from the factories within those States as well as from factories in adjoining and remote States. We are not aware of the circumstances in which such movements take place. We recognise that there may be practical difficulties in some cases for the Cement Controllers to issue instructions for the transport of cement from a particular factory to a destination within a particular area, but we consider that it is essential that uneconomic or wasteful transport should be avoided as far as possible.

(c) It was represented to us by A.C.C. and some other companies that they are put to a substantial loss on account of rebate which they have to pay to the Central and State Governments for the cement supplied to them. The price of cement recommended by us is based on the ex-works cost of A.C.C. and other necessary charges. We have not taken into account any rebate which A.C.C. have to pay to the Central and State Governments. In view of this position, we consider that it is a matter which should

be negotiated by the companies concerned with the Central and State Governments.

(d) Exports of cement from India by sea and land during 1951-52 and 1952-53 amounted to 65,758 tons and 53,442 tons, respectively. The factories which have been set up since 1949 were allowed to export cement in order to enable them to secure a higher price for their cement, if possible. We have been informed by Shree Digvijay Cement Co. Ltd., that the export market for Indian cement in Middle East countries is now dwindling and that the price offered for Indian cement is also not attractive. Even if the export market position may not continue to be as favourable as it was hitherto, we consider that it would be beneficial for high cost units if the cement produced by them is allowed to be exported to foreign countries in reasonable quantities. It will be seen from the prices estimated by us for these high cost units in paragraph 10 above that the extra price recommended by us in paragraph 13 will not enable them to earn adequate return. Consequently, any extra margin which the high cost units may receive on exports will only give them some additional relief. We have not, therefore, taken this margin into account in arriving at the figures given in paragraphs 9 and 13. A.C.C. and other companies have also exported cement during 1951-52 and 1952-53. The exports were, however, small and in any case the extra profits earned were not such that, if taken into account, the basic price of cement for internal consumption could be reduced to any appreciable extent. Subject to the desirability of safeguarding the internal supply position, Government may consider whether the units other than the high cost units may also be allowed to export cement in reasonable quantities.

18. Our conclusions and recommendations are summarised

Summary of conclusions
and recommendations.

as under:-

(i) The total installed capacity of the twenty-three factories producing cement as on 1st January, 1953, was 4.0 million tons. Actual production during 1951 and 1952 was 3.16 million tons and 3.52 million tons, respectively. The total demand for cement is estimated at 3.65 million tons for 1952-53 and an increase of about 10 per cent. per annum in the demand may be assumed for the next three years. [Paragraph 4(a) and (d)]

(ii) The cost of naked cement f.o.r. destination for the production of 17.401 lakh tons of all the A.C.C. factories in India works out to Rs. 55.02 per ton for the year ended 31st July, 1952. [Paragraph 6(c)]

(iii) In estimating the works costs for 1953 the production of the six selected factories of A.C.C. has been taken at 10.8 lakh tons. The cost of naked cement f.o.r. destination for all A.C.C. factories in India for the year 1953 is estimated at Rs. 59.14 per ton. [Paragraph 7]

(iv) The actual cost of naked cement f.o.r. destination for the latest period adopted for costing and the estimated costs for 1953 of factories other than A.C.C. factories are given in paragraph 8.

(v) In estimating works costs for 1953, working capital has been calculated on the basis of five months' cost of production and interest is allowed at the rate of $4\frac{1}{2}$ per cent. per annum. A return of 10 per cent. on block inclusive of any bonus that may be paid is allowed. [Paragraph 9]

(vi) The price per ton of naked cement f.o.r. destination, inclusive of interest on working capital and return on block, as estimated for 1953 for A.C.C. factories and other factories is given in paragraph 10.

(vii) An allowance of Rs. 7-12-0 per ton, which will be inclusive of Rs. 3.85 per ton allowed for depreciation, has been allowed to A.C.C. to cover the cost of rehabilitation, modernisation and expansion, subject to the condition, to

which the Company have agreed, that this allowance after payment of income-tax thereon shall be set aside annually for the implementation of the programme of rehabilitation, modernisation and expansion and no part of it should be utilised for any other purpose. In the case of other companies also excluding those for which extra price is recommended the difference between Rs. 72-0-0 per ton, viz., the price of naked cement per ton f.o.r. destination recommended in paragraph 12 and the estimated price of naked cement f.o.r. destination as stated in paragraph 10, should be set aside annually for rehabilitation, modernisation and expansion, subject to a maximum amount of Rs. 3.88 per ton and no part of it should be utilised for any other purpose. [Paragraph 11]

(viii) The basic price for all the companies should be fixed on the basis of the estimated price of cement produced by A.C.C. The price of naked cement should be fixed at Rs. 72-0-0 per ton f.o.r. destination. [Paragraph 12]

(ix) An extra price of Rs. 8 per ton in the case of Shree Digvijay Cement Co. Ltd., India Cements Ltd., Orissa Cement Ltd., and Travancore Cements Ltd., and of Rs. 5 per ton in the case of Mysore Iron and Steel Works should be given to enable these units to maintain their production and offset the disadvantage of high costs during the period of price fixation. [Paragraph 13]

(x) Packing charges for cement should be fixed on the basis of the average of the maximum and minimum price of the packing material during each week of the nine months immediately preceding the day from which the charges are intended to come into force. [Paragraph 14(a)]

(xi) A uniform all-India price of Rs. 73-0-0 per ton of naked cement on f.o.r. destination basis should be fixed. A Fund should be set up from which payments could be made to the high cost units to compensate them for the loss incurred by them owing to the fixation of a common price for all the units. An amount at the rate of Re. 1 per ton should be

collected by Government from all the units except Shree Digvijay, India, Orissa, Travancore and Mysore on their total sales during the year and put into the Fund. Out of this Fund, payments should be made to Shree Digvijay, India, Orissa and Travancore at the rate of Rs. 7 per ton and to Mysore Works at the rate of Rs. 4 per ton on their internal sales in India. [Paragraph 15]

(xii) The basic price of cement, viz., Rs. 72 per ton and the extra price for high cost units as indicated in paragraph 12 should be fixed for a period of three years. [Paragraph 16]

(xiii) In the case of high cost units supplying cement to distant places in India, the difference, if any, between the total amount of freight actually incurred by them and the total amount of freight calculated at the average freight rate of Rs. 15 per ton should be paid to them at the end of the year out of the Fund referred to in paragraph 15. [Paragraph 17(a)]

(xiv) The movements of cement supplied by the different factories should be so regulated as to avoid, as far as possible, uneconomic or wasteful transport. [Paragraph 17(b)]

(xv) The question of rebate payable by the cement companies to the Central and State Governments for the cement supplied to them should be negotiated by the companies concerned with the Government. [Paragraph 17(c)]

(xvi) It would be beneficial for the high cost units if the cement produced by them is allowed to be exported to foreign countries in reasonable quantities. [Paragraph 17(d)]

19. We desire to express our thanks to the representatives of the various companies manufacturing cement who

Acknowledgments. furnished us with detailed and elaborate information and tendered evidence before

us. We are grateful to the Government of India for the valuable information supplied by them. Our thanks are also

due to Shri B.B. Saxena, Deputy Secretary to the Government of India in the Ministry of Commerce and Industry for the assistance he gave us during the course of the inquiry.

M.D. Bhat,
Chairman.

B.V. Narayanaswamy,
Member.

B.N. Adarkar,
Member.

B.N. Das Gupta,
Member.

C. Ranasubban,
Member.

D.K. Malhotra,
Secretary.

Bombay,

18th July, 1953.



सत्यमेव जयते

APPENDIX I
(Vide paragraph 2)
Government of India
Ministry of Commerce and Industry.

New Delhi, the 6th December, 1952.

RESOLUTION
(Tariffs)

No. 3-T(5)/52.

The price of cement ruling at the present time has been in force since 1948 when it was fixed on the basis of the costs of production then prevailing. Thereafter an advantage in price was given to certain new units by allowing them to charge higher prices than other companies. Early this year this concession was withdrawn. All the cement producers have now represented to the Government of India that, since the cost of production of cement has gone up on account of the increase in railway freight on coal, labour charges, cost of raw materials, etc., an increase in the existing prices is necessary. Some of these units which operate as single units have also asked for their case to be considered specially. After considering these representations the Government are of the opinion that the question whether there should be an increase in the price of cement requires examination. The Tariff Commission is requested to conduct necessary enquiries in this behalf and submit its report to Government as early as possible.

2. Firms or persons interested in the matter who desire that their views should be considered by the Tariff Commission should address their representatives to the Secretary, Tariff Commission, Contractor Building, Nicol Road, Ballard Estate, Bombay-1.

L.K.JHA ,

Joint Secretary to the Government of India.

APPENDIX II

[Vide paragraph 3 (a)]

LIST OF FACTORIES SELECTED FOR COST INVESTIGATION

| Name of the cement factory | Cost Accounts Officer | Date of visit |
|--|---------------------------|--|
| ASSOCIATED CEMENT COMPANIES LTD. | | |
| 1. Kymore Cement Works, P.O. Kymore, via Jukehi, Madhya Pradesh. | Shri S.V. Rajan, A.C.A.O. | 11-3-53 |
| 2. Lakheri Cement Works, Lakheri, Rajasthan. | -do- | 6-3-53 |
| 3. Banmor Cement Works, P.O. Banmor Cement Works, Madhya Bharat. | -do- | 9-3-53 |
| 4. Dwarka Cement Works, P.O. Dwarka, Saurashtra. | -do- | Costing done at their Head Offices in Bombay in February and March, 1953 |
| 5. Porbandar Cement Works, P.O. Porbandar, Saurashtra. | -do- | |
| 3. Sevalia Cement Works, Sevalia, Kaira Dist., Bombay State. | -do- | |
| OTHER FACTORIES. | | |
| 1. Patiala Cement Co. Ltd., Bhupendra Cement Works, Surajpur, PEPSU. | Shri K. Nagaswami, C.A.O. | 18-1-53 to 21-1-53 |
| 2. Dalmia Dadri Cement Ltd., Dalmia Dadri, Rajasthan. | -do- | 27-1-53 to 31-1-53 |
| 3. Orissa Cement Ltd., Rajgangpur, Orissa. | -do- | 12-2-53 to 16-2-53 |
| 4. Kalyanpur Lime & Cement Co. Ltd., Banjari, Bihar. | -do- | 18-2-53 to 20-2-53 |
| 5. Rohtas Industries Ltd., Dalmianagar, Bihar. | -do- | 21-2-53 to 26-2-53 |
| 3. Sonevalley Portland Cement Co. Ltd., Japla, Bihar. | -do- | 26-2-53 to 28-2-53 |

| Name of the cement factory | Cost Accounts Officer | Date of visit |
|---|--------------------------|-----------------------|
| 7. Travancore Cements Ltd., Kottayam, Travancore-Cochin. | Shri S.K. Basu, A.C.A.O. | 17-1-53 to 22-1-53 |
| 8. India Cements Ltd., Thalaiyuthu, Madras State. | -do- | 24-1-53 to 30-1-53 |
| 9. Dalmia Cement (BHARAT) Ltd., Dalmiapuram, Madras State. | -do- | 1-2-53 to 7-2-53 |
| 10. Mysore Iron & Steel Works, Bhadravati, Mysore State. | -do- | 11-2-53 to 17-2-53 |
| 11. Andhra Cement Co., Ltd., Vijayawada, Madras. | -do- | 23-2-53 to 1-3-53 |
| 12. Shri Digvijay Cement Co. Ltd., Port Sika, Saurashtra. | -do- | 6-3-53 to 14-3-53. |



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APPENDIX III
[Vide paragraph 3 (c)]

LIST OF THE REPRESENTATIVES OF THE CEMENT COMPANIES
WHO ATTENDED THE COMMISSION'S INQUIRY.

| Date and time | Name of the Company | Names of the Representatives |
|--------------------------------------|--|--|
| 23rd April 1953 11 A.M. to 1 P.M. | (1) Associated Cement Companies Ltd. and Patiala Cement Company Ltd. | (i) Shri Dharamsey M. Khatri (ii) Shri S. Moolgaokar (iii) Shri H.S. Captain (iv) Shri Haridas Gopaldas (v) Col. L. Swamy (vi) Shri P.S. Mistry Assisted by the following Officers: (i) Dr. R.R. Hattiangadi (ii) Shri G.R. Tongeonkar (iii) Shri H. S. Hirji-Khorse (iv) Shri P.M. Dadachanji (v) Shri E.A. Nadirshaw (vi) Dr. F.P. Antia (vii) Shri M.C. Captain (viii) Shri M.H. Engineer (ix) Shri S.N. Cooper (x) Shri K.V. Talcherkar (xi) Shri D.K. Borkar (xii) Shri S.S. Khullar (xiii) Shri P.S. Shroff (xiv) Shri P.D. Baria (xv) Shri Himatsingh (xvi) Shri L.K. Subramaniam |
| 3 P.M. to 5 P.M. | (2) Dalmia Dadri Cement Ltd. and Jaipur Udyog Ltd. | Shri M.L. Sodhani |
| | (3) Orissa Cement Ltd. and Dalmia Cement (Bharat) Ltd. | (i) Shri N.C. Roy (ii) Shri S.C. Aggarwal (iii) Shri J. Dalmia (iv) Shri Kamalayan Bajaj |

Date and time Name of the Company Names of the Representatives

24th April, 1953

11 A.M. to 12 Noon

- | | |
|----------------------------|---|
| (4) Rohtas Industries Ltd. | (i) Shri Shanti Prasad Jain (ii) Shri Shital Prasad Jain (iii) Shri M.M. Oswal (iv) Shri G.C. Jain |
|----------------------------|---|

12 Noon to 1 P.M.

- | | |
|-----------------------------------|--|
| (5) Shri Digvijay Cement Co. Ltd. | (i) Shri R.P. Maloo (ii) Shri S.G. Somani (iii) Shri R.V. Maheshwari |
|-----------------------------------|--|

3 P.M. to 5 P.M.

- | | |
|--|--|
| (6) India Cements Ltd. and Travancore Cements Ltd. | (i) Shri T.S. Narayanaswamy (ii) Shri S. Rudinger |
|--|--|

25th April, 1953

10 A.M. to 11 A.M.

- | | |
|--|--|
| (7) Sone Valley Portland Cement Co. Ltd. | (i) Shri S.N. Mukerjee (ii) Shri R.N. Kapur (iii) Shri C.W. Harvey (iv) Shri K. Patty (v) Shri J.C. Dutt (vi) Shri K.B. Sethna (vii) Shri N.C. Maitra (viii) Shri L. Prasad |
|--|--|

11 A.M. to 12 Noon

- | | |
|----------------------------|--|
| (8) Andhra Cement Co. Ltd. | (i) Shri R.D. Shah (ii) Shri D.S. Dutt (iii) Dr. Lakshmana Rao |
|----------------------------|--|

12 Noon to 1 P.M.

- | | |
|--------------------------------------|----------------------|
| (9) Kalyanpur Lime & Cement Co. Ltd. | Shri R.S. Srivastava |
|--------------------------------------|----------------------|

1 P.M. to 2-P.M.

- | | |
|---------------------------------|---|
| (10) Mysore Iron & Steel Works. | (i) Shri S. Muninanjappa (ii) Shri Muniswamy |
|---------------------------------|---|

27th April, 1953.

General discussion with all the above representatives.

APPENDIX IV
[Vide paragraph 4 (a)]

LIST OF EXISTING CEMENT FACTORIES IN INDIA, THEIR CAPACITY
AS ON 31ST JANUARY, 1953 AND ACTUAL PRODUCTION (CEMENT
GROUND) IN 1950, 1951 AND 1952.

| Name of factory and address | Year of Commence- ment of production | Installed capacity as on 1-1-1953. | ACTUAL PRODUCTION | | |
|--|---|---|-------------------|------------------|------------------|
| | | | 1950 | 1951 | 1952 |
| | | Tons | Tons | Tons | Tons |
| 1. FACTORIES OF A.C.C. LTD. | | | | | |
| 1. Lakheri Cement Works, Lakheri, Rajasthan. | 1917 | 350,000 | 210,451 | 257,183 | 270,987 |
| 2. Banmor Cement Works, Banmor, Madhyabharat. | 1922 | 60,000 | 58,230 | 60,437 | 55,149 |
| 3. Dwarka Cement Works, P.O. Dwarka, Saurashtra. | 1921 | 220,000 | 161,633 | 159,471 | 180,363 |
| 4. Khalari Cement Works, P.O. Khalari, Bihar. | 1936 | 100,000 | 73,697 | 74,059 | 75,475 |
| 5. Kistna Cement Works, Vijayawada, Madras. | 1939 | 90,000 | 88,776 | 85,377 | 77,027 |
| 6. Kymore Cement Works, P.O. Kymore, Madhyapradesh. | 1923 | 350,000 | 339,247 | 353,448 | 360,566 |
| 7. Madukkarai Cement Works, P.O. Madukkarai, Madras. | 1934 | 280,000 | 232,811 | 277,960 | 231,977 |
| 8. Porbandar Cement Works, P.O. Porbandar, Saurashtra. | 1913 | 42,000 | 28,003 | 30,755 | 34,542 |
| 9. Shahabad Cement Works, Shahabad, Hyderabad. | 1925 | 240,000 | 160,622 | 162,069 | 150,773 |
| 10. Chaibasa Cement Works, Jhinkpani, Bihar. | 1947 | 200,000 | 181,025 | 200,386 | 212,916 |
| 11. Sevalia Cement Works, Sevalia, Bombay. | 1951 | 200,000 | - | 59,773 | 158,840 |
| Total A.C.C. Factories | | 2,132,000 | 1,534,497 | 1,720,918 | 1,808,615 |

II. SUBSIDIARY OF A.C.C. LTD.

| | | | | | | |
|-----|--|------|---------|---------|---------|---------|
| 12. | Patiala Cement Co., Ltd., Bhupendra Cement Works, Surajpur, PEPSU | 1939 | 300,000 | 198,396 | 244,892 | 262,910 |
|-----|--|------|---------|---------|---------|---------|

III. OTHER FACTORIES

| | | | | | | |
|-------------------------|--|------|-----------|-----------|-----------|-----------|
| 13. | Dalmia Dadri Cement Ltd., Dalmia Dadri, PEPSU. | 1939 | 60,000 | 41,227 | 55,271 | 67,843 |
| 14. | Dalmia Cement (Bharat) Ltd., Dalmiapuram, Madras. | 1939 | 250,000 | 164,298 | 236,139 | 228,950 |
| 15. | Orissa Cement Ltd., Rajgangpur, Orissa. | 1951 | 166,000 | - | 655 | 132,711 |
| 16. | Rohtas Industries Ltd., Dalmienagar, Bihar. | 1938 | 350,000 | 121,807 | 261,567 | 331,859 |
| 17. | Andhra Cement Co. Ltd., Vijayawada, Madras. | 1939 | 105,000 | 27,910 | 56,021 | 77,112 |
| 18. | Kalyanpur Lime & Cement Works, Ltd., Banjari, Bihar. | 1946 | 36,000 | 30,680 | 33,144 | 37,312 |
| 19. | Shree Digvijay Cement Co. Ltd., Port Sika Saurashtra. | 1949 | 115,000 | 110,088 | 99,263 | 120,243 |
| 20. | India Cements Ltd., Talaithuthu, Madras. | 1949 | 100,000 | 89,581 | 107,022 | 98,787 |
| 21. | Travancore Cements Ltd., Kottayam, Travancore-Cochin. | 1949 | 50,000 | 44,511 | 45,791 | 44,716 |
| 22. | Mysore Iron & Steel Works, Bhadravati, Mysore. | 1950 | 83,200 | 25,190 | 57,036 | 77,833 |
| 23. | Sone Valley Portland Cement Co. Ltd., Japla, Bihar. | 1922 | 250,000 | 175,225 | 250,330 | 232,640 |
| Total - Other factories | | | 1,564,200 | 830,517 | 1,202,229 | 1,449,986 |
| Total of I, II & III. | | | 3,996,200 | 2,563,400 | 3,168,039 | 3,521,511 |

APPENDIX V

STATEMENT SHOWING THE ACTUALS F.O.R. DESTINATION COST PER TON OF NAZED CEMENT OF THE VARIOUS UNITS DURING 1951-52
(Vide paragraphs 6 and 8)

| Sl. No. | Name of the Company | Period Investigated | Annual capacity | Actual prodn. of cement equivalent) | Materials | Power & Fuel | Other manufacturing charges | Depreciation | Selling expenses | Average freight | Total f.o.r. cost (col. 9 to 11) |
|---------|---------------------|--------------------------------|-----------------|-------------------------------------|-----------|--------------|-----------------------------|--------------|------------------|-----------------|----------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | Labr./Tons | Labr./Tons | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| (a) | Kynara | 12 months ended July, 1952 | 3,500 | 3,590 | 5.71 | 9.93 | 8.40 | - | - | - | - |
| (b) | Ludhri | -do- | 3,500 | 2,504 | 5.39 | 12.10 | 12.50 | - | - | - | - |
| (c) | Bambur | -do- | 0,800 | 0,409 | 12.27 | 12.95 | 15.62 | - | - | - | - |
| (d) | Dwarka | -do- | 2,100 | 1,578 | 3.72 | 22.75 | 12.20 | - | - | - | - |
| (e) | Porbander | -do- | 0,400 | 0,349 | 10.62 | 16.79 | 22.36 | - | - | - | - |
| (f) | Seralia | -do- | 2,000 | 1,315 | 13.97 | 12.12 | 13.45 | - | - | - | - |
| 1 | A.C.C. | 12 months ended July, 1952 | 21,380 | 17,001 | 6.96 | 13.24 | 13.05 | 3.63 | 2.95 | 15.01 | 56.02 |
| 2 | Patiala | 9 months ended December, 1952 | 3,000 | 2,048 | 4.87 | 12.46 | 11.40 | 3.97 | 2.95 | 10.57 | 45.90 |
| 3 | Danils Dairi | 11 months ended November, 1952 | 0,600 | 0,842 | 5.95 | 10.84 | 14.78 | 2.57 | 3.00 | 10.70 | 47.62 |
| 4 | Danilsapur | Year ended December, '52 | 2,500 | 2,271 | 5.37 | 14.43 | 12.77 | 4.64 | 3.15 | 12.20 | 52.57 |
| 5 | Routas | Year ended October, '52 | 3,500 | 3,352 | 15.25 | 11.25 | 8.24 | 3.24 | 3.00 | 15.38 | 56.38 |
| 6 | Sone Valley | Year ended December, '52 | 2,500 | 2,295 | 17.25 | 11.94 | 13.16 | 1.67 | 1.76 | 14.94 | 40.72 |
| 7 | Kalyanpur | Year ended December, '52 | 0,500 | 0,343 | 8.92 | 12.92 | 20.62 | 3.56 | 2.50 | 14.04 | 62.27 |
| 8 | Andhra | Year ended December, '52 | 1,064 | 0,950 | 15.58 | 15.96 | 14.55 | 7.27 | 1.08 | 7.41 | 57.64 |
| 9 | Kynara | 9 months ended September, 1952 | 0,832 | 0,408 | 12.67 | 16.16 | 14.91 | 8.78 | 1.97 | 11.59 | 64.08 |
| 10 | Digrija | Year ended December, 1952 | 1,150 | 1,177 | 8.44 | 22.37 | 14.30 | 7.79 | 2.61 | 13.48 | 79.27 |
| 11 | India | 9 months ended November '52 | 1,000 | 0,719 | 10.65 | 14.32 | 12.67 | 8.69 | 1.47 | 12.16 | 59.68 |
| 12 | Orissa | 10 months ended October, '52 | 1,060 | 1,064 | 10.85 | 15.99 | 12.27 | 15.73 | 1.50 | 17.38 | 73.75 |
| 13 | Transware | 11 months ended November, '52 | 0,500 | 0,400 | 10.52 | 29.16 | 22.41 | 19.62 | 0.25 | - | 90.96 |

APPENDIX VI

(Vide paragraphs 6, 7, 8 and 10)

STATEMENT SHOWING THE ESTIMATED F.O.R. DESTINATION PRICE PER TON OF NAKED CEMENT FOR THE VARIOUS UNITS FOR THE YEAR 1953

| Sl. No. | Name of the Company | Annual capacity Lakh/Tons | Estimated prodn. (in terms of cement equivalent) | Materials | | Power & Fuel charges | Other manufacturing charges | Depreciation | Selling expenses | Average freight (5 to 10) | Total f.o.r. | Interest on working capital | Return on Block | | | Estimated destination price (11+12+14) |
|---------|---------------------|---------------------------|--|-----------|-------|----------------------|-----------------------------|--------------|------------------|---------------------------|--------------|-----------------------------|-----------------|-------|--------|--|
| | | | | Rs. | Ps. | Rs. | Ps. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| (a) | Kyote | 3,500 | 3,500 | 5.89 | 10.31 | 10.85 | | | | | | | | | | |
| (b) | Lakheri | 3,500 | 2,620 | 5.53 | 13.29 | 14.08 | | | | | | | | | | |
| (c) | Bambur | 0,800 | 0,510 | 12.69 | 14.68 | 20.28 | | | | | | | | | | |
| (d) | Dwarika | 2,100 | 2,000 | 3.98 | 24.93 | 13.00 | | | | | | | | | | |
| (e) | Potlunder | 0,420 | 0,300 | 11.60 | 19.67 | 28.38 | | | | | | | | | | |
| (f) | Seralia | 2,000 | 1,970 | 14.88 | 13.90 | 14.29 | | | | | | | | | | |
| 1 | A. C. C. | 21,380 | 18,530 | 7.34 | 14.82 | 15.19 | 3.85 | 2.94 | 15.00 | 59.14 | 1.01 | 152.7.8 | 7.92* | 88.07 | | |
| 2 | Patala | 3,000 | 2,760 | 4.98 | 12.77 | 12.91 | 3.66 | 2.94 | 10.57 | 47.83 | 0.87 | 158.0 | 6.75 | 54.45 | | |
| 3 | Dalmia Dabri | 0,800 | 0,800 | 5.86 | 11.14 | 17.08 | 2.00 | 3.00 | 10.70 | 49.95 | 0.92 | 38.0 | 6.34 | 57.11 | | |
| 4 | Dalmiapuram | 2,500 | 2,250 | 6.01 | 15.22 | 15.22 | 4.18 | 3.18 | 12.20 | 57.01 | 1.06 | 155.4 | 6.91 | 84.99 | | |
| 5 | Rohas | 3,500 | 3,000 | 19.43 | 11.63 | 11.70 | 3.15 | 3.00 | 15.38 | 63.89 | 1.07 | 187.0 | 6.56 | 70.92 | | |
| 6 | Sone Valley | 2,500 | 2,350 | 16.45 | 11.83 | 14.90 | 1.49 | 1.76 | 14.94 | 61.36 | 1.14 | 147.0 | 6.85 | 66.75 | | |
| 7 | Kalyanpur | 0,900 | 0,340 | 9.00 | 11.70 | 22.86 | 3.00 | 2.50 | 14.04 | 63.09 | 1.08 | 20.6 | 6.02 | 70.16 | | |
| 8 | Andra | 1,054 | 0,948 | 14.47 | 14.85 | 18.27 | 8.54 | 1.39 | 7.41 | 62.93 | 1.12 | 98.0 | 7.17 | 71.22 | | |
| 9 | Hydore | 0,832 | 0,750 | 13.55 | 16.02 | 17.20 | 8.64 | 2.00 | 11.56 | 69.00 | 1.15 | 99.5 | 13.25 | 63.41 | | |
| 10 | Digvijay | 1,150 | 1,047 | 9.51 | 22.04 | 18.62 | 7.86 | 2.50 | 13.48 | 74.08 | 1.17 | 116.4 | 11.13 | 86.39 | | |
| 11 | India | 1,000 | 0,800 | 11.44 | 16.68 | 20.56 | 8.79 | 1.85 | 12.16 | 72.28 | 1.22 | 127.6 | 14.16 | 87.08 | | |
| 12 | Orissa | 1,460 | 1,350 | 12.49 | 16.83 | 16.15 | 13.22 | 1.60 | 17.36 | 77.57 | 1.13 | 167.0 | 12.36 | 91.06 | | |
| 13 | Tremore | 0,600 | 0,460 | 11.34 | 24.36 | 25.18 | 17.44 | 0.24 | - | - | 78.69 | 1.48 | 102.3 | 22.68 | 102.72 | |

* Return adjusted for profit on sale of coal outside cement works.



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MAP SHOWING INDIAN CEMENT FACTORIES

