

GOVERNMENT OF INDIA TARIFF COMMISSION

REPORT

ON

The Continuance of Protection to the Soda Ash Industry

सन्धर्मन जयत

BOMBAY, 1961

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India, Tariff (--- Commission)

Report on the Continuance of Protection to the Soda Ash Industry—1961,



PERSONNEL OF THE COMMISSION

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SECRETARY

SHRI PRAMOD SINGH



GOVERNMENT OF INDIA

MINISTRY OF COMMERCE AND INDUSTRY

New Delhi, the 27th November, 1961.

RESOLUTION I

TARIFFS

No. 32(1)-T.R./61.—The Tariff Commission has submitted its Report on the continuance of protection to the *Soda Ash Industry* on the basis of an inquiry undertaken by it under sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows:—

- (1) Protection to the soda ash industry should be continued at the existing rates of protective duty, namely, Rs. 8.37 per quintal (Preferential) and Rs. 11.32 per quintal (standard) for a further period of three years ending 31st December 1964 (apart from the countervailing duty equal to the usual excise duty leviable on the item).
- (2) It is not desirable to levy excise duty on that part of soda ash production which is used for self consumption as a raw material for brine purification.
- (3) For encouraging the use of alternative fuels like furnace oil particularly in areas in Southern and Western India to which coal movements by rail are becoming increasingly difficult, Government may review the impact of excise duty on such oil.
- (4) The question of providing for a higher depreciation or a rehabilitation allowance for cost-determination purposes in respect of soda ash and similar chemical industries on account of the highly corrosive nature of the materials used, should be examined further by Government as this is a general issue.
- (5) If a consumer undertakes to carry out protective measures for wagons used as required by the Railways, the higher freight rate for bulk salt should not be enforced.
- (6) The Railway Administration should, in consultation with soda ash manufacturers, evolve a workable arrangement for bulk movement of salt in open wagons and extend the facilities to cover long distance movement of salt also.
- (7) The alleged anomaly in freight rates on ammonium chloride which, though actually a fertiliser, is not charged at the lower rate for fertilisers when supplied to industrial consumers, may be considered by the Railway Administration for suitable action.

- .8) Government should adopt a flexible policy as regards licensing of additional capacity for soda ash.
- (9) In the interest of development of the soda ash industry in an area which possesses natural advantages, the Government of Gujarat should sympathetically consider lifting or reducing the sales-tax on steam purchased by Saurashtra Chemicals from the Gujarat Electricity Board.
- (10) Hindusthan Salt Co. should take speedy steps to implement its schemes for installing necessary equipment for bulk handling of salt.
- 2. Government accept recommendation (1) above and necessary legislation will be undertaken in due course.
- 3. Government have taken note of recommendations (2) to (8) and steps will be taken to implement them as far as possible.
- 4. The attention of the Government of Gujarat is drawn to recommendation (9).
- 5. The attention of the Hindusthan Salt Co. is drawn to recommendation (10).

ORDER

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

सन्यामेव जयने

B. N. ADARKAR,

Joint Secretary to the Government of India.

GOVERNMENT OF INDIA MINISTRY OF COMMERCE & INDUSTRY

New Delhi, the 5th January, 1962.

RESOLUTION II

- No. Ch.(1)-6(9)/61.—The Tariff Commission has submitted its Report on the prices to be fixed for Soda Ash. The Commission has recommended that,
 - (i) The ceiling price (ex-works) of light Soda Ash should be fixed at Rs. 20 per 50 kg. exclusive of the excise duty which is, at present, Rs. 20 per tonne.
 - (ii) The ceiling price of heavy Soda Ash sold ex-works, conforming to I.S.I. Specification No. IS:251 of 1950 as subsequently amended, should be fixed at Rs. 21:50 per 50 kg., exclusive of the excise duty which is, at present, Rs. 20 per tonne.
 - (iii) The selling price of Soda Ash, both light and heavy, should be fixed on an ex-works basis only.
- 2. Government have carefully considered the above recommendations of the Gommission. Taking into account the manufacturing costs in the units examined by the Commission and the scope for economy in establishment and labour costs in the higher cost unit to which attention has been drawn by the Commission, it has been decided as follows:—
- (a) The ceiling price (ex-works) of light Soda Ash should be fixed at Rs. 19 per 50 kg. In fixing this price Government are satisfied that it will provide a reasonable return to the capital employed in the high cost unit and at the same time impress on such units the desirability of improving their efficiency and reducing the conversion charges;
- (b) With a view to protecting the interests of consumers situated away from the producing centres, Soda Ash should also be made available at *ex-port-town* prices which shall be the price of Rs. 380 per tonne referred to above plus a freight charge of Rs. 15 per tonne for West Coast ports (Bombay and Cochin) and Rs. 25 per tonne for East Coast ports (Madras, Vizagapatnam and Calcutta);
- (c) The ceiling price of heavy Soda Ash sold ex-works or ex-porttowns shall be Rs. 20 per tonne above the ceiling prices for light Soda Ash, as at present;
- (d) Consumers shall be free to purchase Soda Ash at ex-works or ex-port-town prices, according to their discretion;

- (e) The above ceiling prices are inclusive of selling commission, but exclusive of transportation and handling charges ex-works, local taxes & excise duty etc;
- (f) These prices will come into force with effect from the date of the publication of this Resolution and be in operation till 31st December, 1962.

ORDER

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

G. C. L. JONEJA.

Joint Secretary to the Government of India.



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REPORT ON THE CONTINUANCE OF PROTECTION TO THE SODA ASH INDUSTRY

- 1. This is the fifth tariff inquiry into the soda ash industry, previous inquires having been held in 1949, 1951, 1955 Previous tariff Inquiand 1958. A brief account of the inquiries upto 1955 is given in paragraph 1 of our last Report on the continuance of protection to the soda ash industry (1958). We recommended in that Report continuance of protection to the industry upto 31st December 1961 at the then existing rates of duty, namely, Rs. 4.25 per cwt., preferential, and Rs. 5:75 per cwt., standard. This recommendation was accepted by Government and given effect to by the Indian Tariff (Amendment) Act, 1958. By the Customs Duties and Cesses (Conversion to Metric Units) Act. 1960, the protective duties were revised to Rs. 8.37 per quintal, preferential and Rs. 11.32 per quintal, standard. Subsequently, with the levy of an excise duty of Rs. 2 per quintal on indigenous soda ash by the Finance Act, 1961, a countervailing duty of an equivalent amount was imposed on the imported product.
- 2. As the present protective duties will lapse on 31st December 1961

 we have undertaken this inquiry under Section

 11(e) read with Section 13 of the Tariff Commission Act, 1951, which empowers us to inquire into and report on any further action required in relation to the protection granted to an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.
- 3.1. A press note was issued on 3rd April 1961 inviting parties interested in the inquiry as producer or consumer to obtain copies of the relevant questionnaire 3. Method of Inquiry prepared by us and furnish their replies. Questionnaires were issued to known producers and main consumers of soda ash in the country. The Development Wing was requested to furnish a detailed memorandum on the progress of the industry since our last inquiry and information regarding the small scale sector was called for from the Development Commissioner, Small Scale Industries. The Directors of Industries in the States of Gujarat, Uttar Pradesh and Maharashtra were approached for memoranda on the present position. of the industry in their respective States. The views of other State Governments were also invited in case they were interested in the inquiry. The Textile Commissioner, Bombay was asked to indicate the textile industry's requirements of soda ash and also to give allied particulars. Information relating to c.i.f. prices and landed costs of the latest consignments of imported soda ash was sought from the Collectors of Customs at principal ports and particulars regarding domestic prices in certain foreign countries were called for from our trade representatives there. Letters were issued to the State Trading Corporation of India

Ltd., which has been handling imports of soda ash calling for information relating to distribution, selling prices, etc., of imported soda ash. Comments were invited from the Coal Controller on the complaints of manufacturers of soda ash in regard to supply of coal and coke of requisite quality and from the Railway Board on the complaints made and remedial measures suggested by the industry in respect of transport difficulties and high rates of freight. The Indian Chemical Manufacturers' Association, Calcutta and the associations of consuming industries such as glass, bichromates, soap, paper and textiles were called upon to submit information relating to such aspects of the inquiry as they were concerned with. The Indian Standards Institution was asked to give information regarding standard specifications for soda ash. The Director General of Supplies and Disposals was requested to supply data regarding Government purchases of soda ash. A list of those to whom questionnaires and letters were issued and from whom replies were received is given in Appendix I.

- 3.2. Shri K. R. P. Aiyangar, Chairman, visited the factories of Dhrangadhra Chemical Works, Dhrangadhra, Tata Chemicals Ltd., Mithapur and Saurashtra Chemicals, Porbandar on 13th, 15th and 16th June 1961 respectively. Shri J. N. Dutta, Member, visited the factory of Sahu Chemicals and Fertilizers, Waranasi on 21st August 1961. Shri S. Saha, Technical Director (Chemicals) visited the factory of Sahu Chemicals and Fertilizers on 11th June 1961 and that of Tata Chemicals between 17th and 19th August 1961.
- 3.3. For ascertaining the costs of production of soda ash three factories were visited by our Cost Accounts Officers: (i) Tata Chemicals, Mithapur by Shri U. R. Padmanabhan from 16th to 22nd June 1961; (ii) Dhrangadhra Chemical Works, Dhrangadhra; and (iii) Saurashtra Chemicals, Porbandar, by Shri P. M. Menon, Cost Accounts Officer, on 15th and 16th June and from 19th to 21st June 1961 respectively.
- 3.4. A public inquiry into this industry was held on 29th August 1961. Discussions relating to costs were held on 30th August 1961 with the representatives of the three companies mentioned. On the same day, representatives of Sahu Chemicals and Fertilizers also met us to explain their estimates of cost of production of soda ash. A list of persons who attended the public inquiry is given in Appendix II.
- 4. The recommendations made by us in our last Report (1958) on Implementation of recommendations made in our last Report (1958) on matters other than tariffs.

 are given below:—
 - 4.1. "Government should take necessary steps at an early date to establish capacity for the manufacture of superior high grade coke."

High grade coke is produced by the coke ovens attached to (1) Durgapur Industries Board in West Bengal and (2) Hindustan Steel Works. They are said to be in a position to supply coke of requisite grade to chemical industries including soda ash. But the manufacturers of soda ash contended that coke made available to them contained a high percentage of ash and they would be willing to pay a higher price if better grade coke was allotted to them. Some producers who bought coke from parties having surplus coke like Sindri Fertilizers & Chemicals Ltd. also complained about the coke not being of proper grade and size. The Coal Controller has informed us that allotments made by him were adequate and that producers would do well to have arrangements for proper scrutiny of coke at the loading end. The subject is further discussed in paragraph 7.1.3.

4.2. "The Railway Administration should undertake an examination of the question relating to open wagon movement of salt after taking into account the steps adopted in other countries for the purpose."

This question was examined by the Railway Administration which recommended steps to be adopted by the consignors regarding handling of wagons, such as covering the floors and sides of wagons with kraft paper and cleaning of wagons with fresh water after unloading of salt at destinations. On a trial basis, open wagons were offered for bulk movement of salt from Kharaghoda and Sambhar. The producers are not satisfied with the arrangement. We shall revert to the subject in paragraph 7.1.1.

4.3. "Arrangements should be made to import light soda ash to the extent of about 37,000 tons in 1958, and heavy soda ash to the extent of about 48,000 tons in 1958, 44,000 tons in 1959 and 7,000 tons in 1960. Apart from ensuring the importation of these quantities, efforts should be made to regulate their arrival and supply in an even manner."

Imports of light soda ash and heavy soda ash (natural and synthetic) have been channelled through the State Trading Corporation. Actual quantities of light and heavy soda ash imported into India during the last three years are given in paragraph 9.2. We were informed by the Development Wing that while issuing import licences, due weight is given to factors such as (i) the growing requirements of soda ash. (ii) the gap between indigenous demand and production, (iii) need for a buffer stock with the State Trading Corporation to meet any shortfall in the domestic production of soda ash, and (iv) maintenance of prices. at a standard level throughout the country. Arrival and supply of soda ash are also regulated in an even manner. As regards heavy soda ash required by the glass industry, imports are arranged on the recommendations of the Development Wing. The actual production performance of each glass manufacturer is the criterion in deciding his import quota of soda ash. It has been reported that this arrangement is working satisfactorily.

- 5.1. Units in the industry.
- 5.1.1. At the time of our last inquiry, Tata Chemicals Ltd., Mithapur and Dhrangadhra Chemical Works Ltd., Dhrangadhra were the only two units engaged in the manufacture of soda ash. Besides, three new units were then licensed to manufacture soda ash, namely, Saurashtra Chemicals, Porbandar, Sahu Chemicals and Fertilizers, Varanasi and Khan Bahadur H.M.D.H. Bhiwandiwalla & Co., Bombay. Of these, only Sahu Chemicals and Saurashtra Chemicals have gone into production, the first in November 1959 and the second in December 1959. The third unit is still in the formative stage. Thus, there are at present four manufacturing units and one prospective producer. Brief particulars of each of these units are given below:—
- 5.1.2. Tata Chemicals Ltd., Mithapur.—This company is engaged in the manufacture of a variety of chemicals such as heavy chemicals, marine chemicals, pharmaceuticals and agro-chemicals. Soda ash (including the dense variety to be made from 1962) and caustic soda are among the major products. The authorised capital of the company is Rs. 10 crores while the issued and paid-up capital as on 30th June 1960 was Rs. 319.50 lakhs. The net profit available for appropriation was Rs. 10, 80 lakhs in 1957-58, Rs. 18, 07 lakhs in 1958-59 and Rs. 11, 96 lakhs in 1959-60. The dividends paid by the company during the last three years were $7\frac{1}{2}$ per cent, $7\frac{1}{2}$ per cent and 6 per cent respectively on ordinary shares. The company is managed by Managing Agents, Tata Industries Private Ltd., Bombay, who are entitled to a commission of 10 per cent on net profits. Since the last inquiry the company has spent Rs. 225 lakhs on schemes of expansion and modernisation and it estimates an additional outlay of Rs. 70 lakhs to complete its expansion schemes for raising its present capacity to 400 tonnes of soda ash per day. It employs 364 workers in the manufacture of soda ash and has 161 technical personnel on its staff.
- 5.1.3. Dhrangadhra Chemical Works Ltd., Dhrangadhra.—This is also a public limited company and manufactures soda ash in its factory at Dhrangadhra and caustic soda in its other factory at Sahupuram near Tuticorin in South India. The authorised capital of the company is Rs. 3 crores, while the subscribed capital as on 31st March 1960 was Rs. 111.45 lakhs. The net profit available for appropriation was Rs. 2.71 lakhs in 1957-58, nil in 1958-59 and Rs. 16.47 lakhs in 1959-60. Dividends during the first two years of the period were declared at 6 per cent and 4 per cent, while for the third year no dividend was recommended despite satisfactory performance, as the surplus available was mainly utilised for liquidating certain deferred payment liabilities and partly for use as working capital. Sahu Bros. (Saurashtra) Private Ltd. are the Managing Agents who are entitled to a commission of 10 per cent on net profits. The company employs 1334 workers and 121 technical persons.
- 5.1.4. Saurashtra Chemicals, Porbandar.—This is a proprietary concern of Jiyajeerao Cotton Mills Ltd., Gwalior and manufactures soda ash and caustic soda. The original cost of fixed assets employed in the production of soda ash was Rs. 238.21 lakhs as on 31st March 1960.

The company's soda ash plant went into production in December 1959, but due to teething troubles and other difficulties like shortage of power, it could not work to full capacity. In July 1960, the company was granted a licence for substantial expansion of its capacity by 200 tons per day. It has estimated additional requirements of fixed assets at Rs. 80 lakhs for the first stage of expansion. As part of this scheme the company proposes to have a 50 tonnes daily capacity for heavy soda ash. It employs 388 workers and 111 technical personnel.

- 5.1.5. Sahu Chemicals and Fertilizers, Varanasi.—This is a proprietary concern of New Central Jute Mills Co. Ltd., Calcutta, and is engaged in the manufacture of soda ash and ammonium chloride. The original cost of fixed assets as on 31st March 1960 is reported to be Rs. 529.71 lakhs. The factory went into production in November 1959 but is still facing difficulties in achieving its capacity of 120 tonnes per day. The company does not expect its plant to yield a production of more than 30,000 tonnes a year (about 90 tonnes per day) till 1963. In January 1960. it was granted a licence to double its capacity to 240 tonnes per day. The cost of additional block required for implementing its expansion scheme is estimated by the company at Rs. 3 crores excluding the cost of power and steam generation plant. Besides, additional equipment costing between Rs. 35 lakhs and Rs. 50 lakhs is proposed to be installed to improve the present rate of production. The company produces soda ash by the modified Solvay process in which ammonium chloride, a fertilizer, is a co-product. From April 1961 the company undertook the manufacture of heavy soda ash but the quantity produced so far has been negligible. It employs 1128 persons and 127 technical staff.
- 5.1.6. Khan Bahadur H. M. D. H. Bhiwandiwalla & Co., Bombay.— This is proposed to be a public limited company with an authorised capital of Rs. 6 crores and a paid-up-capital of Rs. 5 crores. The soda ash plant of the company will be located at Uran in Kolaba district of Maharashtra State where it will have extensive salt works. The present licensed capacity is 200 tonnes a day and the company contemplates to approach Government to raise it to 400 tonnes of which the capacity earmarked for light soda ash is 200 tonnes, heavy soda ash 100 tonnes and caustic soda 100 tonnes. We were informed during the inquiry that after several infructuous negotiations with different parties during the last three years the terms of foreign collaboration have now been submitted to Government for approval. It is unlikely that this unit would go into production before the end of 1964.

5.2. Capacity.

5.2.1. There has been some lack of uniformity in reporting installed capacity. For Tata Chemicals it was given as daily rated capacity multiplied by 360 days. For others, the daily capacity was multiplied by 330 days. As regards actual attainable capacity making allowance for shut-downs for maintenance and repairs, a 10 per cent deduction on 365 days rating might be made. In other words, the annual rated capacity

could be determined by multiplying the daily capacity by 330. However, it was pressed at the inquiry by representatives of producers that in this industry an average efficiency of 85 per cent of installed capacity was attainable and that 90 per cent would be a high target.

- 5.2.2. In 1958 the capacity of Tata Chemicals was estimated at 72,000 tonnes per annum on the basis of 200 tonnes per day calculated for 360 days. The company had plans to double its capacity in stages to be completed by 1961. But they have been delayed. It has, however, achieved some increase in capacity which was 250 tonnes per day during the first half of 1961 and 300 tonnes from July 1961. The company expects to achieve the capacity of 400 tonnes by April 1962 of which 80 tonnes per day would be heavy soda ash.
- 5.2.3. The capacity of Dhrangadhra Chemical Works was estimated in 1958 at 120 tonnes per day and the company claims to have increased its capacity by 30 tonnes since then. Therefore, its capacity at present should be 150 tonnes. The company has, however, contended that from actual operation it was found that the capacity of its old plant was only 100 tonnes and not 120 tonnes as was wrongly reported till the last inquiry and therefore, its present capacity should be taken at 130 tonnes only. We were informed by the representative of the Development Wing that the manufacturer had already applied to Government for downward revision of his capacity from 150 to 130 tonnes and since the maximum output so far achieved by the plant was 38,098 tonnes in 1960 even after the installation of additional balancing equipment, we have on his advice accepted its present capacity as 130 tonnes.
- 5.2.4. The present daily capacity of Saurashtra Chemicals is 200 tonnes. The company has been granted a licence to double its capacity to 400 tonnes and hopes to achieve it in stages by raising its capacity to 300 tonnes by the end of 1962 and 400 tonnes by the end of 1965. It also has plans for producing heavy soda ash.
- 5.2.5. The capacity licensed to Sahu Chemicals is 120 tonnes a day. This unit also has been issued a licence to double its capacity to 240 tonnes which includes 50 tonnes a day of heavy soda ash. According to the company, its expansion scheme will be completed only by 1965. It expects to progressively increase its production of heavy soda ash.
- 5.2.6. It will, therefore, be seen that the present aggregate capacity of the four units in production is 750 tonnes per day which will rise to 950 tonnes by the end of 1962 and 1170 tonnes per day by the end of 1965. Inclusive of the capacity sanctioned to Khan Bahadur H.M.D.H. Bhiwandiwalla & Co., the aggregate daily capacity of the industry by the end of 1965 may be estimated at 1370 tonnes but for purposes of the present protection period we are not taking the last unit.
- 5.2.7. In the light of production attained by individual manufacturers we have decided to adopt rated capacity at 90 per cent of installed capacity calculated for 365 days in the case of Tata Chemicals and 85 per cent in the case of other units. The relevant figures calculated on the above basis are given below:—

Statement showing installed and rated capacity for so la ash

(In tonnes)

	Daily in at	/insta at th	istalled cap the end of	istalled capacity the end of		nnual	installe	ed capaci	Annual installed capacity at the end of	jo pu	Ann	Annual rated capacity at the end of	capacity	at the e	nd of
Name of producer	1961 1962		963 19	1963 1964 1965	55 1961		1962	1963	1964	1965	1961	1962	1963	1964	1965
1. Tata Chemicals . 300 400	. 300 40		400 400		0 110,0	000	46,000	146,000	400 110,000 146,000 146,000 146,000 146,000 99,000 132,000 132,000 132,000	146,000	000'66	132,000	132,000	132,000	132,000
2. Dhrangadhra Chemical Works	e- . 130 130		130 130) 130	3 48,000 1 48,000		48,000	48,000 48,000	48,000	48,000	41,000	41,000	41,000	41,000	41,000
3. Saurashtra Chemicals	. 200 300		300 300	0 400		000	10,000	110,000	73,000 110,000 110,000 110,000 146,000		62,000	94,000	94,000	94,000	124,000
4. Sahu Chemicals . 120 120	. 120 1.		120 120	0 240		44,000	44,000	44,000	44,000 44,000 44,000	88,000	37,000	37,000	37,000	37,000	74,000
5. Bhiwandiwalla Co.	ં ઝ	:	: '	5 200	Q	•	:	:	:	73,000	:	:	•	:	62,000
Total	. 750 950	950 9	350 95	0 1,3	70 275,	000,	348,000	348,000	950 950 1,370 275,000 348,000 348,000 348,000 501,000 239,000 304,000 304,000 304,000 433,000	501,000	239,000	304,000	304,000	304,000	433,00

Between 1949 and 1961 the annual installed capacity of the industry has grown from 46,800 tonnes to 275,000 tonnes. According to the above table, the annual installed capacity will further increase to 348,000 tonnes in 1962 and 501,000 tonnes in 1965. The corresponding figures for rated capacity are 239,000 tonnes in 1961, 304,000 tonnes in 1962 and 433,000 tonnes in 1965. These figures are inclusive of the capacity for heavy soda ash. Sahu Chemicals expects to undertake regular production of heavy soda ash by the end of 1961, while Tata Chemicals expects to manufacture it on a commercial scale from 1962. Saurashtra Chemicals has under contemplation a scheme to manufacture heavy soda ash from 1963.

5.3. Production.—At the end of the First Five Year Plan the industry's output amounted to about 79,000 tonnes per annum. Production of soda ash by individual units in the industry from 1958 was as follows:—

(In tonnes)

	-				(111 00111100)
Sl. No.	Name of the manufacturer	1958	1959	1960	1961 (Jan-June)
1	Tata Chemicals	57,617	60,180	69,152	44,246
2	Dhrangadhra Chemical Works	31,987	35,136	38,098	19,452
3	Saurashtra Chemicals		••	30,151	20,707
4	Sahu Chemicals	MAT	972	7,611	5,981
	ATT.		<u> </u>		
	Тотац .	89,604	96,288	145,012	90,386

It will be observed that during the last three years the output of the industry has been considerably stepped up. If the rate of production achieved during the first half of the current year is maintained in the latter half, the production during 1961 may be estimated at about 2 lakh tonnes. The Second Five Year Plan set a target of 253,000 tons (or 257,000 tonnes) for annual capacity and of 230,000 tons (or 234,000 tonnes) for annual production to be reached by 1960-61. While the former target has been reached, production falls much below it. The Third Five Year Plan envisages a capacity of 530,000 tonnes by end of 1965-66 with a target production of 450,000 tonnes to be achieved by 1965. Due to delay in the coming up of the fifth licensed unit and the shortfall in production of others we consider that these targets cannot be reached unless there is either a further licensing of capacity in existing plants or the establishment of new plants.

5.4. Future production.—We have discussed with the manufacturers the trend of their future production. The figures for light and heavy soda ash as arrived at after discussion are set out in the following table.

		to decide a commission of the	State	ment sh	owing fu	ıture pro	oduction	Statement showing future production of soda ash	ash			(In tonnes)	nes)
5	Money of Bending		1961			1962			1963			1964	
i 0	Name of Froncer	Light ash	Heavy ash	Total	Light	Heavy ash	Total	Light	Heavy ash	Total	Light	Heavy ash	Total
L	Tata Chemicals	88,000	:	88,000	000,66	20,000	119,000	20,000 119,000 107,000 25,000 132,000 107,000 25,000 132,000	25,000	132,000	107,000	25,000	132,000
Ц	Dharangadhra Che- mical works	37,000	:	37,000	41,000		41,000	41,000	•	41,000	41,000	:	41,000
· ·	Gaurashtra Chemicals.	64,000	:	64,000	64,000		64,000	84,000	12,000	96,000	80,000	16,000	96,000
•	Sahu Chemicals	10,000	2,000	15,000	15,000	10,000	25,000	10,000	20,000	30,000	30,000 20,000	20,000 40,000	40,000
	Тота	199,000		204,000	219,000	30,000	249,000	5,000 204,000 219,000 30.000 249,000 242,000 57,000 299,000 248,000	57,000	299,000	248,000	61,000 309,000	309,000

Between 1961 and 1964, the production of light soda ash is expected to increase from 199,000 to 248,000 tonnes and that of heavy soda ash from 5,000 to 61,000 tonnes.

6.1. In 1958 we estimated the domestic demand for soda ash at 239,000 tonnes made up of 178,000 tonnes of light ash and 61,000 tonnes of heavy soda ash. During the present inquiry we received divergent estimates of demand (with breakdown by different consuming industries) from the Development Wing, producers of soda ash and other interests.

Details are given in Appendix III. The Develoment Wing has placed its estimates of current overall requirement at 260,000 tonnes and expects it to rise to 400,000 tonnes in 1964. The other estimates furnished to us range from 226,000 to 240,500 tonnes for 1961, while for 1964 the demand has been placed at 406,000 tonnes. The apparent consumption of soda ash, comprising of sales of the domestic product, self-consumption for brine purification and for the manufacture of chemical caustic soda and sodium bicarbonate and imports, during the last three years and first half of 1961 is given in the following table:

	To the second se				(In t	onnes)
Sl. No.			1958	1959	1960	1961 (JanJune)
.1	Sales		80,940	81,780	100,910	65,220
2	Self consumption (for chemic caustic soda, sodium bicarb nate and brine purification)	0-	15,560	13,870	23,640	19,310
	TOTAL		96,500	95,650	133,550	84,530
3	Imports		51,670	128,580	108,880	34,700*
4	Apparent consumption.		148,170	224,230	242,430	119,230

The trend of consumption as well as the various estimates of demand furnished to us were discussed at the public inquiry. As in 1958, we have assessed the requirements of each of the consuming industries separately taking into account their possible expansion as also their normal rate

^{*}As the latest issue available of the "Monthly Statistics of the Foreign Trade of India" is for March 1961, we have utilised, for the period April-June 1961, figures of imports furnished by S.T.C.

of consumption of soda ash. On this basis, it was agreed at the public inquiry that the country's requirements of soda ash at present and during the next three years could be estimated as under:—

					(In ton	nes)
Sl. No.	Name of the consuming industry		1961	1962	1963	1964
1	Glass industry, other than bangles		63,000	75,000	90,000	100,000
2	Bangle industry		12,000	13,000	14,000	15,000
3	Silicate industry		35,000	37,000	39,000	41,000
4	Textile industry		12,500	13,000	13,500	14,000
5	Paper industry	.1	7,000	8,000	9,000	10,000
6	Chemical caustic soda industry		28,500	40,000	50,000	50,000
·7	Bichromate industry .		7,000	8,000	9000	11,000
.8	Sodium bicarbonate industry	63	10,000	13,000	14,000	16,000
9	Dhobies and laundries .	y/	75,000	100,000	125,000	150,000
10	Miscellaneous industries .		10,000	12,000	14,000	18,000
	TOTAL	स	260,000	319,000	377,500	425,000

6.2. The above estimates are inclusive of the demand for heavy soda ash. During the public inquiry we explored the possibilities of the maximum use of light soda ash by bichromate and glass manufacturers. We were informed that the bichromate industry's requirements should be met only in heavy ash. As regards the glass industry, we have recommended in our last Report on the continuance of protection to the sheet glass industry (1960), that Government should make available heavy soda ash to the industry. It was explained that while light ash could be used in pot furnaces without impairing quality, blends of light soda ash affected homogeneity and quality of output in tank furnaces. During the current inquiry also the representative of All India Glass Manufacturers' Federation explained that purely on technological grounds the glass industry could not use light soda ash. He, however, suggested that if owing to exchange difficulties imports of heavy soda ash were not adequate, as an alternative, light soda ash of larger grains should be supplied to glass manufacturers. His suggestion was that soda ash manufacturers should install a mechanical sieve and supply the glass industry with

soda ash of required grain size. When it was pointed out by the representative of Tata Chemicals that it would not be economic to install such a sieve, it was suggested on behalf of the glass industry that about 20 per cent of its requirements may be supplied in light soda ash. We have accepted the suggestion. The total requirements of heavy soda ash in the country would work out to 57,000 tonnes for 1961, 68,000 tonnes for 1962, 81,000 tonnes for 1963 and 91,000 tonnes for 1964. Until the indigenous industry succeeds in producing heavy soda ash regularly and in adequate quantities, the requirements of the sheet glass industry should be met in full from imported heavy soda ash.

7.1. The basic raw materials required for manufacture of light and heavy soda ash are salt, lime-stone and coke. Raw materials, power and fuel. Ammonium sulphate, sulphur and soda ash are principal process chemicals, while coke, coal and furnace oil are the main fuels. Of the above materials, sulphur and furnace oil are used in very small quantities for the generation of hydrogen sulphide gas and soda ash for brine purification. The use of sodium sulphide is occasionally resorted to for generating hydrogen sulphide gas. Coke is used in lime kilns for producing lime and carbondioxide required for the Solvay process. It is also used for producing hydrogen, nitrogen and carbondioxide by way of water gas for the modified Solvay process adopted by Sahu Chemicals. Coal and furnace oil are used as fuel in boilers as well as in calciners. With the exception of sulphur, the requirement of which is met by imports, all other raw materials are indigenously available. Ammonium sulphate though indigenously produced is on account of shortage also partly imported through the State Trading Corporation.

7.1.1. Salt.

- 7.1.1.1 Tata Chemicals and Saurashtra Chemicals obtain a major portion of their salt requirements from their own salt works and supplement it by purchases from nearby salt works. Dharangadhra Chemical Works gets supplies of salt from Kuda Salt Works while Sahu Chemicals obtaines it from Hindusthan Salt Co. Ltd., which controls salt works at Sambhar, Rajasthan. During the public inquiry we were informed by the representatives of Tata Chemicals and Saurashtra Chemicals that due to heavy rains during 1960 and 1961 salt beds have suffered heavily and they have to purchase larger quantities of salt from outside.
- 7.1.1.2. It was represented to us that unlike the soda ash industry in foreign countries like the U.K. and the U.S.A., which obtains salt cheaply from underground salt deposits, Indian producers have to depend upon solar salt which is costlier. Further, the salt in India is rendered more expensive as the railways charge higher freight rates on the commodity when carried in bulk under class 37.5-A instead of under class 35-A on the plea of reduction in the life of wagons due to corrosion from salt carried in bulk. The representative of Tata Chemicals stated that bulk salt movement in other countries with more moist climates was done without ill-effect on rolling stock. In order to reduce the price of salt when used as an industrial raw material, he urged that the bulk

movement of salt should be allowed under class 35-A. We have examined the request carefully and recommend that if a consumer undertakes to carry out protective measures for wagons used as required by the railways the higher rate for bulk salt need not be enforced.

- 7.1.1.3. As already mentioned in paragraph 4.2 the Railway Administration has, on our recommendation in the last Report, offered open wagons for bulk movement of salt subject to certain conditions being fulfilled. It was represented to us that while the soda ash manufacturers would guarantee the cleaning of wagons with fresh water after unloading to the satisfaction of the Railways, the other stipulations regarding covering of floor and sides of wagons with matting or kraft paper of suitable quality should be waived as it entails heavy expenditure at every loading and use of imported material. The industry suggested the adoption of alternative protective measures like lime-wash or a thick coating of bituminous paint. We were informed that the Railway Administration did not consider the former as suitable. No information is, however, available whether the latter method has been tried out. We recommend that the Railway Administration should, in consultation with the manufacturers, evolve a workable arrangement for bulk movement of salt in open wagons and extend the facilities to cover long distance movement of salt also.
- 7.1.1.4. Sahu Chemicals represented to us that Hindusthan Salt Co. Ltd., had no arrangement for weighment of salt wagons with the result that salt had to be packed in bags and weighed before it was unloaded into open wagons. This not only involved excessive manual labour and unnecessary expenditure on bags, but also resulted in loss of salt. Hindusthan Salt Co. is understood to have schemes for installing the necessary equipment for bulk handling. We recommend that speedy steps should be taken to implement the schemes without delay.
- 7.1.1.5. Sahu Chemicals also represented to us that prior to October 1959 Reshta salt and crystal salt used to be marketed by Hindusthan Salt Company at a uniform price. The former contained less magnesium and impurities. It was contended that the supplier raised the price from time to time so that it now exceeds the price of crystal salt by Rs. 3 · 20 per tonne. The Hindusthan Salt Co. is reported to be setting up a washery at Sambhar for ensuring greater purity of salt and contemplates a similar washery at Kharaghoda. For Sambhar salt the cess stands at Rs. 5 · 85 per tonne as compared with Rs. 3 · 24 per tonne for other salt. The industry considers the extra cost incidence burdensome. We would draw the attention of the Salt Commissioner to the above so that he may investigate the matter and ensure that the price of Reshta salt, as industrial raw material, is kept as low as possible.
- 7.1.2. Limestone.—This is used by Tata Chemicals, Dhrangadhra Chemical Works and Saurashtra Chemical for producing lime and carbondioxide. While the first two get substantial portion of lime-stone supplies from Ranavav, the third obains its requirements from Kajia-wadri and Adityana quarries. Apart from the impact of increased freight

rates, following the implementation of the recommendations of the Railway Freight Structure Enquiry Committee, no complaint has been received from the industry in regard to availability of the material at reasonable prices.

7.1.3. Coke.—Tata Chemicals obtains nut-coke from Tata Iron & Steel Co. Ltd., while the other units get supplies from various sources through the Coal Controller. The manufacturers have complained about difficulties in obtaining suitable quality of coke. In this connection, the Coal Controller has informed us that the soda ash industry is being supplied with hard coke of grade I quality conforming to the following specifications:—

Ash content , . . . not exceeding 24 per cent

Volatile matter not exceeding 2 per cent

Ash fusion temperature . . . above 1250° C.

In his opinion so far as quality and Shatter Index are concerned, grade I coke should meet the requirement of this industry. As regards under sizes in actual supplies, which were pointed out by Dhrangadhra Chemical Works and Saurashtra Chemicals, the Coal Controller has observed that companies may do well to appoint their own inspecting staff to check the size of hard coke at the loading point.

- 7.1.4. Ammonium sulphate.—This material is partly imported through the State Trading Corporation, as indigenous production falls short of the domestic requirements even for fertilisers. The manufacturers of soda ash have expressed their desire to switch over to the use of ammonium chloride as it is now available in adequate quantities from Sahu Chemicals. It was mentioned to us that there is an anomaly in freight rates as this chemical which is actually a fertiliser is not charged at the lower rate for fertilisers when supplied to industrial consumers. We recommend that this should be considered by the Railway Administration for suitable action.
- 7.1.5. Soda ash.—Tata Chemicals has represented that under the Finance Act, 1961, an excise duty at Rs. 2 per quintal is levied even on that part of its production of soda ash which is used for brine purification. It has requested that such production as is meant for process utilisation should be free from the excise levy. We have examined the issue-

carefully. While the incidence of such levy on the final cost of manufacture of soda ash may not be large, we consider that it is not desirable to tax that part of soda ash which is used as a raw material for brine purification.

7.2. Fuel:

- 7.2.1. Coal is the main fuel required for generation of steam for power and other purposes. Furnace oil serves as an alternate fuel but its use is restricted mainly on account of its higher cost. Tata Chemicals, Dhrangadhra Chemical Works and Sahu Chemicals have expressed dissatisfaction with the quality and supply of coal by the Coal Controller. In this connection the Coal Controller has explained that since against the assessed requirement in 1961 of 7557 wagons on an average per day for coal loading the actual availability was about 5850 wagons, no consumer could expect to receive his supply by rail to the desired extent. Consumers in Gujarat and Maharashtra are particularly affected for supply from West Bengal and Bihar coal fields. According to the Coal Controller soda ash units in these areas are supplied with non-coking coal of grade I quality with an ash content not exceeding 24 per cent to which this chemical industry is entitled. As regards Sahu Chemicals, the Coal Controller has observed that despite the issue of circulars the company did not care to have the question of coal supply clarified before designing and installing its boiler house. The Chief Combustion Engineer attached to the Coal Controller's office who inspected the works about a year ago is stated to have remarked that the power house was not correctly designed to have boilers of proper capacity to take care of both power load and the process steam requirement. The company has, therefore, no legitimate ground to complain against the grade or quality of coal supplied to it. We suggest that having regard to the deteriorating coal supplies, power plants should, in their own interest, carry out as early as possible necessary adjustments, to enable them to work with slack size or lower quality fuel or arrange where possible for oil firing.
- 7.2.2. Government have introduced a scheme of subsidising the movement of coal by sea. Under the scheme the consumer in Southern and Western regions will get his supply of coal at almost the same cost as if the movement had been by the rail route. The subsidy is admissible in respect of coal moved under the scheme from the port of Calcutta on or after 1st May 1961 and the quantum of subsidy will be equal to the difference between the actual freight by the rail-cum-sea route and the rail freight by the all-rail-route. This arrangement should go a long way in easing the supply position of coal to the units located in Saurashtra. As regards alternative fuels like furnace oil, we consider there will be an overall advantage in encouraging their use particularly in areas in Southern and Western India to which coal movements by rail are becoming increasingly difficult. What is acting as a main deterrent now to its extended use is the high duty of excise. For reasons we have mentioned in our Report on Fair Prices to the Cement Industry (paragraph 17.2) we recommended that this matter may be reviewed by Government.

8. Soda ash is generally produced in two grades namely, dense and light, and according to the Indian Standards Specification for soda ash, technical IS: 251 of 1950 as subsequently amended in 1956 to upgrade the requirements, these varieties should have the following physical characteristics:—

	Gra	đe			Appare of 3		olume in M1.			density in per cu.ft.
Dense	 •	•	•	•	25	to	35	54	to	75
Light	•				50	to	65	29	to	37

At the last inquiry the consensus of opinion of consumers was that the quality of the domestic product was satisfactory. However, a few complaints were received relating to the dull colour of the light soda ash and higher moisture content. These deficiencies, it was explained, were due to the very nature of soda ash which is subject to weathering action of atmospheric moisture and carbon dioxide. In connection with the present inquiry Tata Chemicals, Dhrangadhra Chemical Works and Saurashtra Chemicals have stated that they have taken various steps to improve and maintain the quality of their product and to ensure that it conforms to I. S. Specification. They claim to have controlled various processes involved in the manufacture of soda ash by frequent analysis of raw materials and process streams at different stages of production. in their analytical control laboratory located within the factory itself. Systematic records of such analyses are maintained by them for the guidance of their plant technicians and operators. During the current investigations also we have received some complaints regarding the dull colour of indigenous product; the manufacturers have also admitted having received a few complaints of similar nature. To remedy the situation Dhrangadhra Chemicals has stated that it has introduced a strict inspection of every consignment for colour before despatch. Tata Chemicals, however, attributed the dull colour of the product to weathering action and to obviate this difficulty it has suggested that consumers should obtain their requirements in air-tight containers at a slight extra cost. We discussed the issue at length during the public inquiry. The evidence received by us from important associations and industrial consumers indicates that there has been improvement in the quality of the domestic product and that it is, on the whole, satisfactory. As regards heavy soda ash, the production of which was undertaken only recently, the output in the initial stage was not of required density. As such, there has been an adverse report from the glass industry. The manufacturer has expressed his awareness of the deficiency in his product and has assured that his regular production to be undertaken from about the end of the year will conform to the standard specification.

9.1. Import control policy.—For the purpose of import control, soda ash is classified under serial No. 26 of Part Import control policy V, Section II of the Import Trade Control Scheand imports dule. With effect from the licensing period October 1958-March 1959, imports of light soda ash as well as those of natural/synthetic heavy soda ash (of a purity not less than 98 per cent Na₂Co₂) are canalised through the State Trading Corporation of India. Since April-September 1959 licences are also being granted to cotton textile mills, registered cloth processors and exporters to import, among other items, soda ash against the export of cotton textiles and yarn. As regards the actual quantities to be imported, the State Trading Corporation operates on the advice of the Development Wing which, together with the Development Council for Alkalies and Allied Industries, reviews the position every six months.

- 9.2. Imports.—Imports of soda ash, light and dense (heavy), as recorded in the Monthly Statistics of the Foreign Trade of India were 51,670 tonnes valued at Rs. 106.97 lakhs in 1958, 128,584 tonnes valued at Rs. 237.10 lakhs in 1959, 108,880 tonnes valued at Rs. 195.50 lakhs in 1960 and 20,397 tonnes valued at Rs. 37.56 lakhs in the first quarter of 1961. A detailed statement showing country-wise imports of soda ash, by quantity and value, during these periods is given in Appendix IV. The statement shows that imports of light soda ash rose from year to year but from 1961 with greater availability of indigenous light soda ash imports are being reduced. During 1959 and 1960 the bulk of imports came from the United Kingdom while in the first quarter of 1961 imports were mostly from Rumania and Bulgaria. The bulk of imports of heavy soda ash was from Kenya.
- 10. Soda ash is assessed to customs duty under item No. 28(4) of the First Schedule to the Indian Tariff Act, 1934, the relevant extract from which is reproduced below:—

Item	Name of article	Nature	Standard rate	duty is the m	if the	rate of e article luce or ture of	Duration of pro-
No.	Name of afficie	of duty	of duty	The Unit- ed King- dom		Burma	of pro- tective rates of duty
1	2	3	4	5	6	7	8
28(4)	Soda ash including calcined na- tural soda and manufactured sesqui-carbonates.	••		••	••	5 per- cent ad valorem	

1	2	3	4	5	6	7	8
(a)	manufactured in a British Colony.	Protective.	Rs. 8.37 per quintal plus the excise duty for the time being leviable on like articles, if produced or manufactured in India, and where such duty is leviable at different rates, the highest duty.	••	••	***	December 31st, 1961.
(b)	not manufactured in a British Colony.	Protective.	Rs. 11·32 per quintal plus the excise duty for the time being leviable on like articles, if produced or manufactured in India, and where such duty is leviable at different rates, the higest duty.	3		••	December 31st, 1961

Note.—By the Finance Act, 1961, and excise duty at the rate of Rs. 2 per quintall has been imposed on soda ash manufactured in India.

11.1. Our Cost Accounts Officers examined the cost of production of soda ash manufactured by Tata Chemicals Ltd., for the year ended 30th June 1960 and the nine months ended 31st March 1961 and by Dhrangadhra Chemical Works Ltd., for the year ended 31st March 1961. The relative cost reports are being forwarded

to Government as confidential enclosures to this Report. On the basis of data obtained by the Cost Accounts Officers we have estimated the fair ex-works prices of the two units for the years 1962 to 1964. As regards the other two units, Saurashtra Chemicals and Sahu Chemicals and Fertilisers, although they commenced production of soda ash at the end of 1959, they were not in a position to make available adequate data to enable us to assess their costs of manufacture. Initial delays in

availability of power etc. have greatly affected the production of Saurashtra Chemicals and added to its preliminary expenses which appear to have been capitalised. Nevertheless with its advantage for the main raw materials, salt and limestone, we are satisfied that when the plant attains streamlined production by the end of 1961, as it expects to do, it will do reasonably well on the basis of the prices we fix taking note of the costs of the established units. Sahu Chemicals and Fertilisers represented to us that as soon as it reached a rate of production of 2,000 tonnes per month over a period of six months, a fair ex-works price based on its actual working of the plant should be allowed to it. We do not consider this a feasible proposition as no differential prices are contemplated in the scheme of price fixation. This is dicussed further in paragraph 16.1.

- 11.2. Our estimate of the fair ex-works price of soda ash to be produced by Tata Chemicals during the period 1962 to 1964 works out to Rs. 352·19 per tonne or Rs. 17·61 per 50 Kgs. and that of Dhrangadhra Chemical Works to Rs. 382·48 per tonne or Rs. 19·12 per 50 Kgs. The various factors which we have taken into account in arriving at these estimates are briefly described below:—
- 11.3.1. Production.—We have estimated the annual average output for the next three years at 120,000 tonnes for Tata Chemicals. During the year 1962 the company does not anticipate that its average output will exceed 363 tonnes per day, whereas from 1963 onwards the output is expected to be maintained at the maximum level of 400 tonnes per day. As explained earlier in paragraph 5.2.3. in view of its derated capacity we have estimated the production of Dhrangadhra Chemical Works as 41,000 tonnes per year for the period 1962 to 1964.
- 11.3.2. Consumption and price of raw materials.—The consumption of raw materials for both companies has been estimated in line with their performance during the period for which actual costs have been ascertained. In general, the consumption rates of different materials are comparable to our previous estimates. The latest available prices have been taken into account for all materials, including the increase in the cess on salt.
- 11.3.3. Conversion charges.—The conversion charges (excluding depreciation) are lower in our estimates as compared to those of 1958 in the case of Tata Chemicals, which should be attributed to the larger production assumed by us as compared to that in 1958. In the case of Dhrangadhra Chemical Works there is a wide disparity in the figures of production assuemed by us in 1958 and now because of its reduced capacity. Labour and establishment costs of this unit are also higher and it was explained by the representatives of the company that costs had gone up due to labour awards. Although there is manifest surplus of labour they are unable to effect any retrenchment except through natural wastage. This together with the increases in other expenditure has resulted in its conversion charges being substantially higher than in our estimates of 1958. We have all observed that the overhead expenses

of this company have registered considerable increase in comparison with our past estimate. We suggest therefore that the company should exercise stricter control over its labour costs and overhead expenditure and make determined efforts to keep down its cost of production.

- 11.3.4. Depreciation.—In 1958 it was estimated that in accordance with the expansion programme then in hand, capital expenses aggregating about Rs. 98 lakhs were to be incurred by Tata Chemicals during the years 1958-59 and 1959-60. Of this Rs. 98 lakhs, the value of plant and machinery specifically pertaining to soda ash was estimated to be of the order of Rs. 66:35 lakhs. The total expenditure including the expansion of common departments which render service to both soda ash and caustic soda units at Mithapur, actually incurred during 1958-59 and 1959-60 amounted to Rs. 161.80 lakhs. A further expenditure of Rs. 107 · 72 lakhs has already been incurred in 1960-61 and the proposed additions during the next three years ending June 1964 are estimated by the company at Rs. 289.62 lakhs. Of the total Rs. 397.34 lakhs, the value of plant, machinery and building for the soda ash unit alone is of the order of Rs. 111.65 lakhs, which includes Rs. 8.25 lakhs for the installation of equipment intended for the conversion of light soda ash into heavy variety. Since the company was not in a position to furnish data regarding the operation costs for this process, we have not been able to estimate separately the cost of production of dense soda ash. For the purpose of calculating depreciation for future, we have admitted besides the specific expenditure on soda ash manufacture, a suitable proportion of depreciation on account of the extensions to the common service departments. In the case of Dhrangadhra Chemical Works the total expenditure for its second expansion of capacity and normal additions to capital investments during the three years ended March 1961 amounted to Rs. 32:85 lakhs. While calculating depreciation at rates prescribed by Income-tax authorities on the written down value of the assets we have also taken into account the normal yearly additions to a reasonable extent during each of the next three years.
- 11.3.5.1. Rehabilitation.—Due to the highly corrosive nature of the material used in the soda ash and caustic soda industries, a demand was made for higher depreciation or a rehabilitation allowance. As regards higher depreciation for soda ash and similar chemical industries, we consider this to be a general issue determinable only by expert engineering advice. This would require consideration by the Income Tax authorities as well. We recommend that Government may have this matter further examined.
- 11.3.5.2. In asking for an element in the price for building up rehabilitation reserves, Tata Chemicals has estimated the useful life of all assets on an everage of 18 years. Taking the depreciation rate allowed for the bulk of plant and machinery in chemical industries at 15 per cent of the written down value, if it is funded on a compound interest at 5 per cent taxable or 2.75 per cent tax free, the accumulated depreciation on an asset costing Rs.100 together with interest over a period of 18 years will amount to Rs. 133.16. The residual value will be

Rs. 5.37, and the total amount available Rs. 138.53. Together with the tax concession on the development rebate which is now available on new assets, amounting to 9 per cent of the replacement cost, the total amount available will be enough to cover an increase in the value of capital assets by about 50 per cent over the period as shown below:—

							Rs.
Replacement value of the asset						•	150.00
Tax concession on the developm	ent r	ebate a	at 9 pe	er cen	t .		13 50
Accumulated depreciation with i	inter	est the	reon	and re	sidua	l value	138 · 53
Accumulated depreciation with i	inter	est the	reon	and re	sidua	l value	138
					-	Готаl	152.03

In claiming rehabilitation allowance, Tata Chemicals has made an assumption that increase in the replacement cost of capital assets will be at the rate of 3 per cent per annum (compound). We consider this to be unrealistic. In fact, the position is that under the existing rates of depreciation for chemical plants almost 80 per cent of the value would be written off within 10 years. In the case of a highly corrosive industry renewals and replacement of large sections of the plant will occur within much shorter intervals and the higher maintenance charges will also be reckoned in the actual costing. We, therefore, feel that in the case of this industry, a rehabilitation allowance claimed purely on the score of the long term rise in replacement cost vis-a-vis resources that could be made available from depreciation and development rebate is not justified.

- 11.3.6. Packing.—The price of gunny bags used for packing soda ash has registered considerable increase in the recent past and has resulted in significant increase in the cost of packing. The cost of gunny bags ex-Mithapur amounted to Rs. 258 per 100 bags and in the case of Dhrangadhra Chemical Works this worked out to Rs. 236 per 100 bags. We have allowed these costs for gurny bags, the normal mode of packing in both units being 75 Kgs. of soda ash per bag.
- 11.3.7. Return.—The return has been allowed on the capital employed which is estimated at the average net value of assets together with the working capital assessed at an amount equivalent to five months' cost of production exclusive of depreciation. It was represented that the rate of return allowed by us was not adequate to cover gratuity, bonus, interest on borrowed capital, managing agents' commission and still to leave an adequate margin for distribution as dividend to the shareholders. We have taken into account on this occasion the incidence on gratuity. In view of the present method of remunerating capital employed, including borrowings at the same rate which is higher than the

ordinary rate of interest for borrowings, no separate allowance on this account can be considered. As regards managing agents' commission, we are satisfied that being based on profits it should properly be a charge thereon. We have also advisedly made no change in our previous treatment of profit-sharing bonus as a charge on profits in view of the reference of the whole matter to the Bonus Commission.

Although the producers represented that a higher rate of return on the employed capital should be allowed, we did not see sufficient justification to revise our earlier view that a return of 12 per cent would be fair and reasonable for the industry as a whole.

- 11.3.8. Margin for contingencies.—In view of our taking into account labour cost and incidentals on stores at latest rates, an allowance of Rs. 10 per tonne for contingencies to cover unforeseen increases in costs is considered adequate and this amount has been allowed for both units.
- 11.3.9. We give below a statement indicating the figures of (a) our estimate of fair ex-works prices as stated in our 1958 report, (b) the actual costs of production nad (c) our estimate of fair ex-works prices for the period 1962 to 1964 in respect of both Tata Chemicals and Dhrangadhra Chemical Works.

सन्द्राभव जयन

Production sion's sion's stimate sion's sion's sion's sion's sion's sion's sion's sion's settimate sion's sion's settimate sion's sion's settimate sion's sion's sion's settimate sion's sion'			Tata	Tata Chemicals Ltd., Mithapur	td., Mithap	ın.	Dhrangae L	Dhrangadhra Chemical Works Ltd., Dhrangadhra	Chemical Works Dhrangadhra
Solutions of the stimate of the stimat				Cost of pr	oduction	Detimoto		, to 5	704:300
Rs. R			sion's estimate 1958	1959—60	1960—61 (nine months ending 31-3-61)	for 1962 to 1964	sion's estimate 1958	production 1960—61	for 1962 to 1964
Rs. R		Production (Tonnes)	70,104		57,702	1,20,000	47,043		41,000
sciation) . 106.95 115.83 112.62 102.03 115.98 164.23 . 27.10 32.12 37.13 38.22 24.80 28.29 . 23.32 20.32 22.55 37.39 22.34 23.82 . 9.84 . . 10.00 9.84 . . 2.39 1.98 2.03 2.25 . . . 255.66 276.50 291.06 299.13 270.70 338.88 . 45.96 . . 53.06 32.98 . . 301.62 . . 352.19 303.68 . . 15.08 . 17.61 15.18 .	2	1. Raw materials	Rs. 86.06	100	Rs. 116.73	Rs. 109.24	Rs. 97.74		Rs. 122.41
	ŭ	2. Conversion charges (excluding depreciation)	. 106.95		112.62	102.03	115.98	164.23	164.43
	Ã	3. Depreciation	. 27.10		37.13	38.22	24.80		19.99
9.84 10.00 9.84 2.39 1.98 2.03 2.25 255.66 276.50 291.06 299.13 270.70 338.88 3 45.96 53.06 32.98 301.62 352.19 303.68 3 15.08 17.61 15.18 3	Pa	4. Packing charges	23.32	y	22.55	37.39	22.34	23.82	31.57
2.39 1.98 2.03 2.25 255.66 276.50 291.06 299.13 270.70 338.88 45.96 53.06 32.98 301.62 352.19 303.68 15.08 17.61 15.18	ිටී	5. Contingencies	9.84	:	:	10.00	9.84	:	10.00
	×	6. Royalty to Government	2.39		2.03	2.25	•	:	:
	රී	7. Cost of production	. 255.66		291.06	299.13	270.70	338.88	348.40
301.62 352.19 303.68 35.19 303.68 315.08 15.08	2	8. Return at 12% on capital employed	. 45.96		:	53.06	32.98	:	34.08
15.08 17.61 15.18	뗪	Fair ex-works price per Tonne	301.62			352.19	303.68	:	382.48
	Fa	Fair ex-works price per 50 kgms.	15.08	:	:	17.61	15.18		19.12

It will be seen from the above statement that our estimate of fair ex-works price of soda ash to be produced by Tata Chemicals during 1962 to 1964 which is Rs. 17:61 per 50 Kgs. is higher by Rs. 2:53 per 50 Kgs. and that of Dhrangadhra Chemical Works which is Rs. 19:12 per 50 Kgs. is higher by Rs. 3:94 per 50 Kgs. when compared to the estimates made by us in 1958.

- 11.4. Freight disadvantage.—For the purpose of arriving at the fair ex-works price of indigenous soda ash which should be compared with the c.i.f. price of the imported product in order to assess the quantum of protection, it is necessary to assess the notional freight disadvantage which indigenous product suffers from as compared to the imported one. In accordance with our past practice and after taking into account the future pattern of distribution of the producers we have assessed the amount of such disadvantage for Tata Chemicals at Rs. 1·78 per 50 Kgs. and for Dhrangadhra Chemical Works at Rs. 1·60 per 50 Kgs. The fair ex-works price inclusive of freight disadvantage of soda ash to be produced by Tata Chemicals thus works out to Rs. 19·39 per 50 Kgs. and by Dhrangadhra Chemical Works to Rs. 20·72. We have taken the lower price of the bigger producer namely Rs. 19·39 as the fair ex-works price for purposes of assessing the quantum of protection required by the industry.
- 12. A statement showing c.i.f. prices, customs duty, clearing charges and landed costs of the latest imports of light and heavy soda ash as furnished by the Collectors of Customs, the State Trading Corporation and its distributors is given in Appendix V. During recent months, the lowest c.i.f. price has been Rs. 171.05 per tonne and it related to imports of light soda ash from Bulgaria. At the public inquiry we were informed that imports have not taken place at a lower price that this. We have, therefore, adopted this figure for assessing the quantum of protection needed by the industry.

13. In the statement given below, a comparison is made of the fair ex-works price of indigenous soda ash with the landed cost ex-duty of imported material ex-duty of soda ash imported from Bulgaria.

	- 	•	 		Rs. per 50 Kgs.
1. Fair ex-works price plus freight disa	dva	ntage	•	•	19.39
2. C.i,f. price of imported soda ash					8.55
3. Clearing charges					0.34
1. Landed cost ex-duty (2 plus 3).					8.89
5. Difference between (1) and (4).				,	10.50
6. Existing rate of duty, standard	_	_			5.66

14.1. In the above statement the quantum of disadvantage of the indigenous soda ash industry has been calculated on the basis of price of imported light soda ash and not heavy soda ash, synthetic or magadi.

The quantum has gone up from Rs. 7:84 per 50 kgs in 1958 Rs. 10.50 per 50 kgs now. This is due to the fact that while there has been a rise in our present estimate of fair ex-works price over our previous estimate, the c.i.f. price of imported soda ash, which has been adopted for assessing the quantum of disadvantage is more or less the same that was accepted in 1958. Thus, purely on the basis of comparison of estimated fair ex-works price with c.i.f. price, the industry needs protection at a higher rate that is, the protective duty needs to be raised from the present rate of Rs. 5:66 per 50 kgs to Rs. 10:50 per 50 kgs. Such a comparison does not, however, take into account the following factors. The industry is enjoying substantial protection from import trade control and only the quantity which is required to fill the gap between domestic demand and indigenous production is allowed to be imported and the imported soda ash is also sold at the same price as fixed for the domestic product. There is little likelihood of the present restriction on imports or control over prices being relaxed in the forceable future. The problem of the industry, therefore, is not any competition from imported product. In the circumstances, the rates of protective duty do not by themselves play an important role in the protection or development of the industry. An enhancement of the existing rates will not serve to improve the position of the industry in the present circumstances. On the other hand, it may affect those industries which are now permitted to import soda ash by cashing their import licences under the Export Promotion Scheme, as they would have to pay a higher rate of duty. On the whole, therefore, we do not consider that the existing rates of protective duty, namely, Rs. 11:32 per quintal, standard, and Rs. 8.37 per quintal, preferential, should be revised upwards.

14.2. As regards the question whether in the circumstances mentioned above protection to the industry should be continued, it is observed that the development and consolidation of the units that have come into the field during the period of protection have not reached a stage when the industry can do away with tariff protection. Moreover, expansion in the capacity of the industry either by extension of existing units or by installation of new units is envisaged. Some of the units in the industry have also taken steps to commence manufacture of soda ash of the dense variety, which needs to be encouraged. Particularly for heavy soda ash, as the imported price of magadi ash is not strictly governed by cost of production, the continuance of protection for indigenous dense soda ash is essential. New techniques of manufacture which may eventually bring down costs are yet in an experimental stage at Sahu Chemicals and Fertilizers, which is reported to be the first of its kind in this country. Withdrawal of protection at this stage might, in our view, act as a disincentive for further flow of capital into this basic industry. After considering all aspects of the case we recommend that 3-8 T. C. Bom./61

protection to the soda ash industry should continue for a further period of three years from 1st January 1962 and that the existing rates of protective duty, standard as well as preferential, should remain in force till 31st December 1964.

- 15.1. Distribution system—Indigenous soda ash.
- 15.1.1. Tata Chemicals.—The company's selling system consists of a sole selling agent, viz., Tata Oil Mills Co. Ltd., Distribution system and with 12 sales offices and about 250 distributors selling prices of soda appointed by the selling agent spread all India. The sales travellers of the selling agent and distributors canvass business from individual consumers and traders and book orders with the sales offices under whose jurisdiction they work. Goods are despatched from the works and the railway receipts are sent to the concerned sales office which, in turn, endorses and passes them on to the distributors against payment, and the latter in their turn deliver the goods to the ultimate buyers and recover the value of the goods according to selling rates prescribed by Tata Chemicals. The company has a technical sales service to assist customers in using its chemical products efficiently and economically. Besides a commission ranging from 2 to $2\frac{1}{2}$ per cent on a slab basis to selling agents, it allows commission to distributors on their sales of soda ash at Rs. 8.66 per tonne. On sales made directly to public bodies, commission at half the above rates is payable. For rate contracts with the Director-General of Supplies and Disposals, State Governments and public bodies, fixed rates are quoted.
- 15.1.2. Dhrangadhra Chemical Works.—The company has appointed Dhrangadhra Trading Co., Pvt. Ltd., Bombay as its Sales Organizer, who has 12 regional distributors at Bombay, Poona, Ahmedabad, Rajkot, Delhi, Calcutta and Madras. The distributors enter into contracts with consumers whose individual consumption of soda ash exceeds 10 tons per month. To cater to the needs of small consumers, these distributors have appointed 233 retail dealers. The distributors are paid a commission or trade discount, as the case may be of Rs. 10 per tonne direct by the producer. The dealers are allowed to add Rs. 10 per tonne to their actual cost. It is relevant to recall in this connection a specific recommendation made by us in our last Report (1958) that Dhrangadhra Chemical Works should re-organise its entire distribution system in such a way as to ensure the supply of the company's product at all points at reasonable prices. From the company's reply to the questionnaire received in connection with our present inquiry, it appears that little change has been made in its distribution system as such. It has, however, explained that its distributors have proper supervision over its stockists, that as it produces only one product (soda ash) its sales organization is adequate, that contracts are entered into directly with industrial consumers and that for small consumers' needs the supervision by distributors located all over the country ensures adequate supply at reasonable prices.

- 15.1.3. Saurashtra Chemicals.—The company entered the market only in 1960. It has appointed 6 regional agents, one each for Bombay, Calcutta, Madras, Delhi, Kanpur and Porbandar, under whom it has about 71 stockists to take care of the respective areas. Normally the area of a district is allotted to the stockists. It pays an overall commission of Rs. 15 per ton of soda ash to be shared between the regional agent (Rs. 5) and the stockist (Rs. 10). No margin or discount is allowed at any stage, except some quality rebate and a fixed handling charge.
- 15.1.4. Sahu Chemicals and Fertilizers.—The company distributes its product through its selling agent, Ashoka Marketing Ltd., Calcutta, which incidentally is also the distributor of Dhrangadhra Chemical Works Ltd. for Bihar, West Bengal and Assam. The selling agent has regional offices at Patna, Varanasi, Lucknow, Delhi, Chandigarh, Jaipur and Bombay and has appointed local stockists who are allotted monthly quotas according to the requirement at different places. There are 23 stockists in Bengal, 12 in Bihar, 12 in U.P., 16 in Punjab and 1 each in M.P., Orissa, Rajasthan and Kashmir. A commission of Rs. 7:50 per tonne is paid to the selling agents who, in turn, pay a commission of Rs. 2 per tonne to local stockists. The local stockists may in addition charge the actual expenditure incurred by them towards freight, cartage. local taxes, etc. The company has stated that since other manufacturers are paving liberal commission and there is keen competition in the sale of soda ash, the question of revising the rate of commission is under its consideration.

15.2. Distribution system—Imported soda ash.

- 15.2.1. Light soda ash.—The State Trading Corporation distributes light soda ash through its four selling agents:—(1) Imperial Chemical Industries (India) Pvt. Ltd., Calcutta, (2) Tata Oil Mills Co. Ltd., Bombay, (3) India United Chemical Distributors Pvt. Ltd., Calcutta, and (4) Chemical and Alkali Distributors Ltd., Bombay. The first two agents have a network of sales organization throughout the country and the last two operate only in Calcutta and Bombay regions respectively. The selling agents clear the goods on behalf of S.T.C., store them in their godowns and distribute them as per instructions of the Corporation. A commission of Rs. 37 40 per tonne is allowed by S.T.C. to the agents to cover all incidental charges (transportation, handling etc.) other than customs duty and port dues.
- 15.2.2. Heavy soda ash.—Heavy soda ash is distributed to actual users by Imperial Chemical Industries, Calcutta (the sole concessionaires for magadi ash) and Chemical and Alkali Distributors, Bombay through their network of organisations, as per instructions of S.T.C. which are in turn based on the recommendations of the Development Wing. No fixed commission is paid to the distributors. I.C.I. is paid by S.T.C. 15 per cent on the landed cost which includes financing, storage, establishment charges, etc. The difference between this and the sale price is remitted to S.T.C. In the case of synthetic ash, the distributor gets a margin over the landed cost up to Rs. 25:28 per tonne to cover charges for financing, storage, establishment etc. The difference between this and the actual selling price is remitted to S.T.C.

- 15.3. Comments of the consumers.—Some consuming interests including the glass manufacturers' associations have expressed dissatisfaction over the distribution system adopted by S.T.C. for imported soda ash as well as the practices followed by producers in distributing indigenous soda ash. In order to ensure regular supply they have asked for an improvement in the present distribution system. The Development Wing has, however, informed us that while there was admittedly a scarcity of soda ash in the country in 1958 and 1959 in view of the restricted imports, which gave rise to many complaints, there have been no recent complaints regarding the distribution system and the position is quite satisfactory at present. State Trading Corporation also periodically reviews the demand and supply position through the port committees. Heavy soda ash imported by S.T.C. is at present supplied mainly to the glass industry. The price of imported heavy soda ash was first raised to the same level as that of light soda ash, and later by 5 per cent again.
- 15.4. Selling prices.—Soda ash is not subject to statutory price control. However, being a basic commodity, a ceiling price has been imposed. In our 1958 Report, we considered that the fair selling price to consumers, ex-works Mithapur and Dhrangadhra, should be fixed at Rs. 16.25 per cwt. of soda ash manufactured by Tata Chemicals and Dhrangadhra Chemical Works. (Saurashtra Chemicals and Sahu Chemicals were not in production then). We arrived at this figure by adding to the fair ex-works price (average of the two companies) a uniform rate of selling expenses. The price was exclusive of sales tax and other levies. On this basis the ceiling prices for indigenous soda ash were fixed by Government at Rs. 18.50 per cwt. ex-works and Rs. 19.00 per cwt. ex-ports. These prices were given effect to from 16th February 1959. The customers were, however, free to continue to buy soda ash according to their own choice, either ex-works or ex-ports. Particulars relating to the selling prices of indigenous soda ash manufactured by four units as well as the imported soda ash (imported through S.T.C.) since our last inquiry are given below:—

15.4.1. Manufacturers' prices to industrial consumers and domestic wholesalers.

					F.O.R. Mithapur/ Dhrangadhra	F.O.R. Port Town Bombay/Madras/ Calcutta/Cochin
,	1				2	3
During 1958 and u	ıp to	15th]	Febru	ary,	Rs. nP.	Rs. nP.
(Dhrangadhra)	•	•			18.82 per cwt.	19.13 per cwt.
(Tatas)	•	•	٠		19.00 ,, ,,	19.50 ,, ,,

1	2	3
From 16th February, 1959 (when ceiling prices were fixed by Government) till September,	Rs. nP.	Rs. nP.
1960	18.50 per cwt.	19.00 per cwt.
From September-October, 1960 till February, 1961 (After switch-over to metric system).	18:20 per 50 kgms.	18.70 per 50 kgms.
From 1st March, 1961 till 31st March, 1961 (with imposition of excise duty @ Rs. 20 per tonne)	, 19.20 ,, ,,	19.70 ,, ,,
From 1st April 1961 to date (when Government increased ceiling price by Rs. 10 per tonne)	19.70 ,, ,,	20.20 ,, ,,

The selling price of soda ash produced by Saurashtra Chemicals and Sahu Chemicals, who entered the market in 1960, has also been fixed at the above levels.

Prices of wholesalers/distributors to retailers, however, vary from manufacturer to manufacturer. Tata Chemicals has explained that as imports of foreign soda ash during the period June 1958-June 1959 were very low. the market prices had soared to a high level. Dhrangadhra Chemical Works has explained that the distributors' selling price to the retailers and industrial consumers (in bulk quantity) up to quarter ending December 1958 was the actual factory price plus the railway freight, handling charges plus a margin of annas six to eight per cwt. After 1st March 1959 the distributors' prices were the same as the factory prices but a commission was paid to them by the sole buyer and this procedure continued up to 31st March 1961. With effect from 1st April 1961, the company is giving commission or trade discount to the distributors (wholesalers) @ Rs. 10 per tonne. Saurashtra Chemicals has stated that its regional agents (wholesalers) charge Rs. 364 per ton (Rs. 18.20 per cwt.) f.o.r. Porbandar less Rs. 10. per ton. Sahu Chemicals has stated that the wholesalers charge the cost of soda ash paid to the factory plus freight, handling charges, local taxes etc. which in all range from about Re. 1 to Rs. 2 per 50 Kgs.

Retailers' prices to consumers.—(Market prices).—While Tata Chemicals does not sell its products in retail, Dhrangadhra Chemical Works has authorised its retailers to add as their margin Rs. 10 per tonne to their cost price. Saurashtra Chemicals' stockists (retailers) add only actual railway freight, handling and godown charges, (if incurred) to the manufacturer's price.

15.4.2. Selling price of imported soda ash.—The selling price of imported light soda ash corresponds to the selling price fixed by Government for indigenous product. The selling price of imported heavy soda ash is fixed by Government. Prices of light and heavy soda ash f.o.r. Port Town/Port Godown as furnished by S.T.C. were as follows:—

Rs.
390 per Long ton.
374 per tonne.
394
404 ,,
346 per Long ton.
380 ,, ,,
393.70 per tonne.
413.70 ,, ,,
423.70 ,, ,,

These prices are exclusive of sales tax and other levies.

- 15.4.3. Comments of the consumers.—Prices of soda ash ruling in the market have been considered as reasonable by a majority of consumers. Nevertheless, we have received some complaints. The Development Wing has informed us that although the market prices shot up very high in 1958 and 1959, they are at normal levels now.
- 16.1. The fair ex-works price inclusive of freight disadvantage indicated in paragraph 11·4 was worked out as a basis for arriving at the quantum of protection needed by the industry against imported material. The future selling price to consumers should, however, be arrived at by adding the selling expenses incurred by the producers in marketing the product. The selling expenses amounted to 86 nP. per 50 Kgs. in the case of Tata Chemicals and 69 nP. in

the case of Dhranghadhra Chemical Works. Inclusive of these expenses the fair ex-works selling price would work out to Rs. 18.47 per 50 Kgs. for Tata Chemicals and Rs. 19.81 for Dhrangadhra Chemical Works. When fixing the fair selling price for the industry as a whole, the units for which we have not been able to assess the cost of manufacture have also to be taken into consideration. At present the industry consists of (a) Tata Chemicals with an annual rated capacity of 99,000 tonnes, (b) Dhrangadhra Chemical Works with 41,000 tonnes, (c) Saurashtra Chemicals with 62,000 tonnes, and (d) Sahu Chemicals with 37,000 tonnes. The last two named units are new. In our view it would not be fair to the majority of the producers if ceiling prices for soda ash were fixed on the basis of the lower cost of production of Tata Chemicals which is the biggest unit in the industry. We consider, therefore, that the future fair ex-works selling prices should be fixed on the basis of the figures determined by us for Dhrangadhra Chemical Works. Accordingly the fair ex-works selling price for the industry should be fixed at Rs. 20 per 50 kgs. of soda ash. This is exclusive of the excise duty, which is at present Rs. 20 per tonne. We, therefore, recommend that the ceiling price ex-works of light soda ash should be fixed at Rs. 20 per 50 kgs. It will be observed that if the future price of soda ash is fixed on the basis of the cost of production for Dhrangadhra Chemical Works as recommended by us, Tata Chemicals, being the low cost producer of the two, will stand to benefit by about Rs. 20.00 per tonne. This is an inevitable situation which is bound to arise in any scheme of uniform price fixation.

- 16.2. Saurashtra Chemicals, which is a new unit, has definite advantages as regards supplies of salt and limestone. In view of the fact that it is expected to reach the level of production of 62,000 tonnes, it will not probably suffer any disadvantage vis-a-vis Dhrangadhra Chemical Works at the price recommended by us. Sahu Chemicals has, however, contended that it would be at a permanent disadvantage in respect of raw materials even when the locational advantage of nearness to coal fields is taken into consideration. This in our view is not a correct assumption because the incidence of cost on fuel and power accounts for much more than the cost of raw materials in this industry and, therefore, nearness to Bihar and Bengal coal fields confers an advantage. There is also a further advantage in the matter of transport cost vis-a-vis the Calcutta market. Despite the high capital cost, we feel that when production of the plant is stabilised at the level of 30,000 tonnes a year, the price we are proposing would prove remunerative for this unit also.
- 16.3. We have not been able to assess the cost of manufacture of heavy soda ash in the absence of any data. Tata Chemicals has estimated the higher processing costs at Rs. 24 per tonne in its case. In the case of Sahu Chemicals, the plant is geared to the production of heavy soda ash and the difference in processing costs will not probably be significant. Since all existing manufacturers have plans to commence manufacture of heavy soda ash and a substantial quantity is expected to be produced in the near future, it is necessary to fix the price for this product also.

Information received from our trade representatives abroad shows that in countries like Belgium and France there is a price differential of Rs. 13 to 15 per tonne. But the development of heavy soda ash in our country needs further encouragement in the context of its need for the glass and bichromate industries. Government have already sanctioned a higher price of Rs. 20 per tonne for imported heavy soda ash. We consider that indigenous producers should be given sufficient incentive to develop the manufacture of this variety and that an allowance of Rs. 30 per tonne over the price of light soda ash would be a reasonable figure for this purpose. We, therefore, recommend that the ceiling price ex-works of heavy soda ash conforming to I.S.I. Specification No. IS: 251 of 1950 as subsequently amended should be fixed at Rs. 21.50 per 50 kgs.

- 16.4. On the question of existing pattern of prices, namely, exworks and f.o.r. ports, we do not find sufficient justification for the continuance of such a scheme as there are practically no imports of light soda ash at present. We, therefore, consider that selling price of soda ash, both light and heavy, should be fixed on ex-works basis only. In coming to this conclusion we duly considered the views of producers. Some of them located in Saurashtra apprehend that, with the development of an up-country unit at Varanasi which is nearer an important consuming centre like Calcutta and in greater proximity to the glass industry, market disadvantages for them in that region with the ex-port differential of 50 nP. for 50 kilos. is inadequate to cover even the treight element. However, it cannot be gainsaid that as against the marketing advantage in the Eastern region, Saurashtra factories have certain compensating advantages for raw material etc.
- 17.1. Tata Chemicals and Saurashtra Chemicals have urged that

 Other recommendations as the coastal shipping service is suspended during the monsoon period, more wagons should be provided to them for movement of soda ash from their works. The requirements of these units were stated to be 25 wagons and 15 wagons respectively per day. This request is reasonable and we suggest that the Railway Administration should try to assist the manufacturers to the extent possible during the period when coastal shipping service remains suspended.
- 17.2. In paragraph 5.3 we have drawn attention to the inadequacy of the existing licensed capacity to meet the Third Five Year Plan targets. We are aware of the latest orders of Government according to which preference is to be given to new-comers. Having regard to the heavy capital investment and complicated technique of the industry we recommend that Government should adopt a flexible policy as regards licensing of additional capacity.
- 17.3. Saurashtra Chemicals has represented against the levy of a sales tax on steam which it purchases from the Gujarat Electricity Board, having been denied at the start the permission to install its own power plant which could have yielded steam. The levy of a sales tax

which falls on consumption by an essential industry which is also the only consumer of the commodity (steam) seems somewhat unique. We recommend that in the interest of development of the soda ash industry in an area which possesses natural advantages, the State Government may sympathetically consider lifting or reducing this levy.

- 18. Our conclusions and recommendations are summarised:

 Summary of conclubelow:

 sions and recommendations
- (i) The current domestic demand for soda ash, both light and heavy, is estimated at 260,000 tonnes and the demand is likely to increase to 319,000 tonnes in 1962, 377,500 tonnes in 1963 and 425,000 tonnes in 1964.

[Paragraph 6.1.]

(ii) If a consumer undertakes to carry out protective measures for wagons used as required by the Railways, the higher freight rate for bulk salt moved should not be enforced.

[Paragraph 7.1.1.2.]

(iii) The Railway Administration should, in consultation with soda ash manufacturers, evolve a workable arrangement for bulk movement of salt in open wagons and extend the facilities to cover long distance movement of salt also.

[Paragraph 7.1.1.3.]

(iv) Hindusthan Salt Co. should take speedy steps to implement its scheme for installing necessary equipment for bulk handling of salt.

[Paragraph 7.1.1.4.]

(v) The alleged anomaly in freight rates on ammonium chloride which, though actually a fertiliser, is not charged at the lower rate for fertilisers when supplied to industrial consumers, may be considered by the Railway Administration for suitable action.

[Paragraph 7.1.4.]

(vi) It is not desirable to levy excise duty on that part of soda ash production which is used for self-consumption as a raw material for brine purification.

[Paragraph 7.1.5.]

(vii) For encouraging the use of alternative fuels like furnace oil particularly in areas in Southern and Western India to which coal movements by rail are becoming increasingly difficult, Government may review the impact of excise duty on such oil.

[Paragraph 7.2.2.]

(viii) As it is a general issue, Government should have the matter relating to higher depreciation allowance examined further.

[Paragraph 11.3.5.1.]

(ix) Protection to the soda ash industry should be continued at the existing rates of protective duty, namely, Rs. 8.37 per quintal, preferential and Rs. 11.32 per quintal, standard, for a further period of three years ending 31st December 1964.

[Paragraph 14.2.]

(x) The ceiling price ex-works of light soda ash should be fixed at Rs. 20 per 50 kgs., exclusive of the excise duty, which is at present Rs. 20:00 per tonne.

[Paragraph 16.1.]

(xi) The ceiling price of heavy soda ash sold ex-works conforming to I.S.I. Specification No. IS:251 of 1950 as subsequently amended, should be fixed at Rs. 21.50 per 50 kgs., exclusive of the excise duty which is at present Rs. 20.00 per tonne.

[Paragraph 16.3.]

(xii) The selling price of soda ash, both light and heavy, should be fixed on an ex-works basis only.

[Paragraph 16.4.]

(xiii) Government should adopt a flexible policy as regards licensing of additional capacity for soda ash.

[Paragraph 17.2.]

(xiv) In the interest of development of the soda ash industry in an area which possesses natural advantages, the Government of Gujarat should sympathetically consider lifting or reducing the sales-tax on steam purchased by Saurashtra Chemicals from the Gujarat Electricity Board.

[Paragraph 17.3.]

19. We wish to express our thanks to the producers, importers and consumers of soda ash, the various associations and State organisations who furnished us with detailed information in connection with this inquiry and to their representatives who gave evidence before us.

K. R. P. AIYANGAR, Chairman.

J. N. DUTTA, Member.

J. N. SEN GUPTA, Member.

R. BALAKRISHNA, Member.

PRAMOD SINGH, Secretary.

Bombay, Dated 30th September, 1961.

APPENDIX I

(Vide paragraph 3.1)

List of firms, bodies, association and Government Departments to whom the questionnaires/letters were issued and from whom replies or memoranda were received

*Indicates those who have replied.

A. PRODUCERS:

- *1. Tata Chemicals Ltd., Bombay House, Bruce Street, Bombay.
- *2. Dhrangadhra Chemical Works Ltd., 15A, Horniman Circle, Bombay.
- *3. Saurashtra Chemicals, Porbandar.
- *4. New Central Jute Mills Co. Ltd., (Sahu Chemicals & Fertilizers) 11, Clive-Row, Calcutta.
- *5. K. B. H. M. D. H. Bhiwandiwalla & Co., 583, Chira Bazar, Bombay (Prospective Producer).

B. PRODUCERS' ASSOCIATION:

* Indian Chemical Manufacturers' Association, India Exchange Place, Calcutta.

C. CONSUMERS:

- *1. Ogale Glass Works Ltd., Ogalewadi, Satara District.
- 2. Bombay Glass Works Private Ltd., Manmala Tank Road, Bombay-16.
- *3. Seraikella Glass Works Ltd., P.O. Kandra (S.E. Rly.), Dt. Singhbum.
- 4. Ganga Glass Works Ltd., Balawali, Bijnor District (U.P.).
- 5. Vazir Glass Works Ltd., Prospect Chambers, Dadabhai Naoroji Road, Fort, Bombày-1.
- *6. Calcutta Mineral Supply Co. Private Ltd., 31, Jackson Lane, Calcutta-1.
- *7. Phoenix Chemical Works, Bachoobhai Building, 187, D. N. Road, Bombay-1
- 8. J. K. Chemicals Ltd., J. K. Building, Dougall Road, Ballard Estate, Bombay-1.
- 9. Mysore Chemical & Soap Works, Sion, Bombay-22.
- 10. Shree Ganesh Chemical Industries, 1181, Parel Tank Road, Bombay.
- Swastic Chemical Industries, Prop. The Silicates (INDIA) Private Ltd., Aryan Brush Compound, Naigaum Cross Road, Dadar (C.R.), Bombay-14.
- 12. Kathiawar Chemical Industries, Jorawarnagar, Saurashtra.
- 13. Rajkot Chemical Industries, Gondal Road, Rajkot.
- 14. ROM Chemical Works, Kevdawadi, Rajkot.

- 15. Indian Mineral Industries Ltd. 22/1 & 22/e, Dum Dum Road, Calcutta-2.
- 16. Satak & Company (Chemical Department), Beawar.
- *17. Proneer Chemical Co., 158, Tulsi Pipe Road, Matunga, Bombay-16.
 - International Chemical Co., 453, Tulsi Pipe Road, P.B. No. 6479, Matunga, Bombay-16.
- *19. Liberty Chemical Works, Nagardas Road, Mogra West, Anderi (East), Bombay-41.
- *20. Director General, Ordnance Factories, Government of India, Ministry of Defence, 6, Esplanade East, Calcutta-1.
- *21. Hindusthan Lever Ltd., Scindia House, Ballard Estate, P.B. No. 409, Bembay-1.
- *22. Indo-Asahi Glass Co. Ltd., 30, Chittaranjan Avenue, Calcutta-12.
- *23. Garment Cleaning Works, Worli, Bombay-18.
- *24. Star Metal Refinery Private Ltd., 361, Hornby Road, Bombay.
- *25. Golden Chemicals Ltd., Vile Parle, Bombay-57.
- 26. Buckingham and Carnatic Co. Ltd., P.B. No. 1966, Madras-1.
- *27. Cawnpore Chemical Works Ltd., Anwargani, P.B. No. 27, Kanpur. (U.P.).
- *28. Chemical Industries Co. Private Ltd., 29, Strand Road, P.B. No. 2380, Calcutta-1.
- *29. Bharat Glass Works, Chembur, Bombay.
- *30. Orient Paper Mills Ltd., 8, India Exchange Place, Calcutta-1.
- *31. Sirpur Paper Mills Ltd., 8, India Exchange Place, Calcutta-1.
- *32. Upper India Couper Mills Ltd., Nishatgani, Lucknow (U.P.).

D. CONSUMER'S ASSOCIATIONS:

- *1. All-India Glass Manufacturers' Federation, Gobind Mansion, Connaught Circus, New Delhi.
- *2. U.P. Glass Manufacturers' Syndicate, Shikohabad.
- *3. Bengal Glass Manufacturers' Association, P-11, Mission Row Extension Calcutta-1.
- *4. Western India Glass Manufacturers' Association, C/o. Industrial and Engineering Apparatus Co. Pvt. Ltd., Chotani Eastate, Proctor Road, Grant Road, Bombay-7.
- South Indian Glass Manufacturers' Association, 34, Gandhi Nagar Bangalore City.
- 6. The Glass Bangles Merchants' Chamber, Firozabad (U.P.).
- *7. Glass Industrial Syndicate, Firozabad (U.P.).
- 8. All-India Bichromate Manufacturers' Association, Currimbhoy House (East), Outram Road, Fort, Bombay-1.
- 9. Indian Paper Mills' Association, India Exchange, Calcutta-1.
- Indian Paper Makers' Association, Royal Exchange Place, P.B. No. 280, Calcutta.

- Indian Soap & Tioleteries Makers' Association, P-11, Mission Row Extension, Calcutta-1.
- 12. Vanaspati Manufacturers' Association, Arya Bhavan, Ballard Estate. Bombay-1.
- *13. Ahmedabad Mill-Owners' Association, Navrangapura, P. B. No. 7, Ahmedabad-9.
- *14. Mill-Owners' Association, Churchgate Street, P.B. No. 95, Bombay.
- *15. Non-Power Soap Manufacturers' Association, 380, Shenker Sett Bungalow Compound, Girgaon Road, Bombay.

E. IMPORTERS:

* State Trading Corp. of India Ltd., Express Building, Mathura Road, New Delhi-1.

F. DISTRIBUTORS OF S.T.C.:

- *1. M/s. Imperial Chemical Industries (India) Private Ltd., I.C.I. House, 34, Chowringhee, P.B. No. 182, Calcutta.
- *2. M/s. Tata Oil Mills Co. Ltd., Bombay House, Bruce Street, Fort, Bombay-1.
- *3. India United Chemical Distributors Ltd., 25, Swallow Lane, Calcutta-1.
- *4. Chemical & Alkali Distributors Ltd., Himalaya House, Paltoan Road, Bombay.

G. GOVERNMENT DEPARTMENTS:

- *1. The Senior Industrial Adviser (Chemicals), Ministry of Commerce & Industry, Development Wing, Udyog Bhavan, Maulana Azad Road, New Delhi.
- *2. The Textile Commissioner, Wittet Road, Ballard Estate, Bombay.
- *3. The Director General of Supplies & Disposals, National Insurance Building, Parliament Street, New Delhi.
- *4. The Collector of Customs, Calcutta.
- *5. The Collector of Customs, Bombay.
- *6. The Collector of Customs, Madras.
- *7. The Collector of Customs, Cochin.
- *8. The Director of Industries, Government of Gujarat, Ahmedabad.
- *9. The Director of Industries, Government of U.P., Lucknow (U.P.).
- *10. The Director of Industries, Government of Maharashtra, Bombay.
- *11. The Indian Standards Institution, 9, Mathura Road, New Delhi.
- *12. The Development Commissioner, Small Scale Industries, Udyog Bhavan, Maulana Azad Road, New Delhi.
- *13. The Coal Controller, 1, Council House Street, Calcutta.
- *14. The Secretary, The Railway Board, Ministry of Railway, New Delhi.
 - 15. The Chief Secretary to the Government of Andhra Pradesh, Hyderabad,

- *16. The Chief Secretary to the Government of Assam, Shillong.
- *17. The Chief Secretary to the Government of Bihar, Patna.
- *18. The Chief Secretary to the Government of West Bengal, Calcutta.
 - 19. The Chief Secretary to the Government of Gujarat, Ahmedabad.
 - 20. The Chief Secretary to the Government of Jammu and Kashmir, Srinagar.
- *21. The Chief Secretary to the Government of Madhya Pradesh, Bhopal.
- *22. The Chief Secretary to the Government of Kerala, Trivandrum.
- *23. The Chief Secretary to the Government of Madras, Madras.
- 24. The Chief Secretary to the Government of Mysore, Bangalore.
- *25. The Chief Secretary to the Government of Orissa, Bhubaneshwar.
- *26. The Chief Secretary to the Government of Maharashtra, Bombay.
- *27. The Chief Secretary to the Government of Punjab, Chandigarh.
 - 28. The Chief Secretary to the Government of Rajasthan, Jaipur.
- 29. The Chief Secretary to the Government of Uttar Pradesh, Lucknow.
- 30. The Chief Commissioner, Delhi Administration, Delhi.
- *31. The Chief Commissioner, Himachal Pradesh, Simla.
- *32. The Counsellor (Commercial) to the High Commission of India in the U.K., "India House", Aldwych (London).
- *33. The First Secretary (Commercial) to the Embassy of India, 15, Rue Alfred Dehodeneg, Paris, XVI eme (FRANCE).
- *34. The First Secretary (Commercial) to the Embassy of India, Via Francisco Dense 36, ROME (Italy).
- *35. The First Secretary (Commercial) to the Embassy of India, 262, Koblenzor-strasse, BONN (West Germany).
- *36. The Second Secretary (Commercial) to the Embassy of India, 585-Avenue Lanise, BRUSSELS (Belgium).
- *37. The First Secretary (Commercial) to the Embassy of India, Empire House (Naigai Building), TOKYO (Japan).
- *38. The Counsellor (Commercial) to the Embassy of India, 2107, Massachusetts Avenue, N.M. Washington-8, D.C. (U.S.A.).

APPENDIX II

(Vide paragraph 3.4)

List of persons who attended the Commission's public inquiry held on 29th August, 1961

A. PRODUCERS:	
1. Shri P. A. Narielwala	Tata Chemicals Ltd., Bombay House, Bruce Street, Fort, Bombay-1.
9. ,, P. C. Jain	Dhrangadhra Chemical Works Ltd., 15-A, Horni- man Circle, Bombay-1.
14. ,, S. K. Vakil	Saurashtra Chemicals, Porbandar.
16. ,, A. K. Jain	Sahu Chemicals & Ferti- lizers, Sahupuri, Varanasi.
19. Shri K. K. Shende ,,	K.B.H.M.D.H. Bhiwandi- walla & Co., 583, Chira Bazar, Bombay-2.
B. PRODUCERS' ASSOCIATIONS:	
20. Shri V. N. Shah Representing	Indian Chemical Manufac- turers' Association, India Exchange, Calcutta.
21. ,, B. M. L. Moorthy ,,	Alkali Manufacturers' Association of India, 15-A, Horniman Circle, Bombay-1.
C. DISTRIBUTORS OF IMPORTED SODA ASS	н:
22. Shri S. C. Puri Representing	Imperial Chemical Industries (India) Private Ltd., I.C.I. House, 34, Chowringhee, P.B. No. 182, Calcutta.

23.

" R. F. Vakharia

Tata Oil Mills Co. Ltd., Bombay House, Bruce Street, Fort, Bombay-1.

24. Shri	D. G. Valia .	•	Representing	Chemical & Alkali Distributors Ltd., Himalaya House, Palton Road, Bombay-1.
D. CONS	SUMERS:			
25. Shri	R. A. Taraporewa	lla .	Representing	Hindustan Lever Ltd., Scindia House, Ballard Estate, P.B. No. 409, Bombay-1.
26. ,, 27. ,,	Krishnalal Kharab D. V. Kundra	oanda .	} "	Pioneer Chemical Co., 158, Tulsi Pipe Road, Matunga, Bombay-16.
28. ,,	Amritlal G. Jajal		,,	Garment Cleaning Works, Worli, Bombay-18.
E. CONS	UMERS' ASSOCIA	ATIONS	:	•
29. Dr.	S. R. Lele .		Representing	All India Glass Manufac- turers' Federation, Go- bind Mansion, Connaught Circus, New Delhi.
30. Shri 31. ,,	Raghubir Singh So D. D. Paliwal	aini .	} - "	Glass Industrial Syndicate, Firozabad (U.P.).
32. ,,	C. D. Shah .		m	Non-Power Soap Manufacturers' Association, 380, Shenker Sett Bungalow Compound, Girgaon Road, Bombay.
33. ,,	G. R. Thatte .			Mill Owners' Association, Churchgate Street, P.B. No. 95, Bombay.
F. GOVE	ERNMENT DEPA	RTMENT	rs:	
34. Shri	P. K. Seshan .	•	Representing	The Senlor Industrial Adviser (Chemicals), Ministry of Commerce & Industry, Development Wing, Udyog Bha- van, Maulana Azad Road, New Delhi.
35. ,,	S. R. Gupta	• •	,,,	State Trading Corporation of India Ltd., Express Bldg., Mathura Rd., New Delhi-1.
36. Dr.	K. I. Narasimhan	•	55	The Textile Commissioner, Wittet Road, Ballard Estate, Bombay.
37. Shri	M. M. Mistry	•	**	The Director General of Supplies & Disposals, National Insurance Bldg., Parliament Street, New Delhi.

3	8. Shri	Gulam Anwar	•	•	Representing	The Salt Commissioner Jaipur.
3	9. "	P. S. Dharwadkar	•	•	,,	Director of Industries, Government of Gujarat Ahmedabad.
4	0. ,,	P. A. Sabnis .	•		**	Director of Industries, Government of Maharash- tra, Bombay.
4	1. ,,	S. L. Sharma	•	•	",	The Development Commissioner, Small Scale Industries, Udyog Bhavan, Maulana Azad Road, New Delhi.
4	2. ,,	K. P. Revankar	•	•	,,	The Collector of Customs, Bombay.
4	3. ,,	A. B. Rao •	•	•	**	The Indian Standards Institution, 9, Mathura Road, New Delhi.



APPENDIX III

(Vide paragraph 6.1)

Statement showing the estimates of demand of soda ash for the years 1961, 1962, 1963, 1964 and 1965 with a break-down into different consuming industries

a1	}	8	8	• • 00	•				
. Total		260,0	226,0	240,500*	:	:		:	:
Misc.		14,000	8,000	•	:	:	:		
Bicar- bonate Washing of soda		97,000 14,006 260,000	7,000 14,000 70,000 10,000 75,000 8,000 226,000	· · · · · · · · · · · · · · · · · · ·	:	:	:		
Bicar- bonate of soda		9,000	10,000		:	:	, :		
Bichro- mates		000'9	ا 70,000	, ~~	•;	:	;		
Caustic Soda	5	8,000 15,000 6,000	14,000	28,500*]	:	:	:		
	Sec.	8,000	7,000		3	:	:		
Textile	1961	11,000	11,000		:	8,700	12,680		1962
Silicate Textile Paper	4	25,000	24,000		}	:	:		
Glass		75,000	70,000	यत	80,000	:	:		
		•	•		•	•	٠		
		•	•		•	•	•		
		1. Development Wing	2. Producers		3. All India Glass Mfrs. Fed.	Millowners' Assen., Bombay.	5. Textile Commissioner .		
		1.	7		e,	4.	۶.		

4.	4. Millowners' Assen. Bombay.	•	•	:		9,550		•	:	:	•	•		
S.	5. Textile Commissioner	•	•	:	∕}; :	13,100	<u>.</u>	<u>:</u>	÷	<u>.</u>	•	<u>:</u> .	•	•
					والمنهجة والمحا	1963	<u>.</u>		<u>.</u>		<u>.</u>	<u>.</u>	<u>.</u>	•
-	1. Development Wing	•	.*	105,000	33,000	00	13,000	33,000	13,000 13,000 33,000 9,000 12,000 108,000 22,300 348,000	12,000	008,801	32,300	348,00	
7	2. Producers	•	• .	95,000	30,000		9,000	0000	9,000 0,000 10,000 13,000 125,000 13,000 358,000	13,000	125,000	13,000	358,000	,_
ઌ	3. All India Glass Mfrs. Fed.	•	•	115,000		:	•	:					•	
4.	4. Millowners' Asscn., Bombay.	•	u ,	:		6 ,730		£	: :	•	:		:	
5.	5. Textile Commissioner.	. •	•	<u>:</u> :	:	1 ,5.	:		<u>.</u>	:	<u>.</u> .		i	
	· · · · · · · · · · · · · · · · · · ·			191.74	9	19				i				
~ i	1. Development Wing	•	•	120,000 40,000	40,000	15/000	8,000	44 000	11000	1,000 1,13,00	1/13,00	25,000 400,000	400,000	43
7	Producers	•	•	107,000	33,000	000	10,00	50,000	12000	14,000 150,000	150,000	15,000 406,000	406,000	_
Э.	3. All India Glass Mfrs. Fed.	•	•	130,000	:	į.			,	٠, ٠		·	•	٠.
4.	4. Milliowners' Assen., Bombay	•	•	•	: :	9820	•	:	:	•	•			
5.	5. Textile Commissioner	•	•	•	***	13.0	: :	•	<u>:</u>	÷ ,	<u>.</u> .			
				Z. Selection		1 5	<u>.</u>	<u>.</u>	<u>.</u>			•	<u>.</u>	
-	1. Development Wing	•	•	140,000	45,000	16,00	20,000	50,00	12,000	20,000	120,000	27,000 450,000	450,000	_
5	Textile Commissioner	• •	ا في			¥.			4		•	*	*	

*Separate estimate by Saurashtra Chemicals and Sahu Chemicals & Fertilizers.

APPENDIX IV

Vide paragraph 9.42)

Statement showing the country-wise imports of soda ast, by quantity and value, during the years 1958, 1959, 1960 and 1961 (Ja.-March)

		•		:			San mary	4				
Country of origin	origin			··	8	- .	1959	6	19	1960	19 (Jan.	1961 (JanMarch)
		•	• • •	• • •	Quantity V (Tonnes), (L.	Value (Laktis of Rs.)	Omntity (Connes)	Velue (Likhs of Rs.)	Quantity (Tonnes)	Value (Lakhs of Rs.)	Quantity (Tonnes)	Value (Lakhs of Rs.)
- Annual -	-				2	1	4	80	-	2	∞	6
Деняе :												
U.K		,	•	•		0.20			80.	ر م		`* *
Kenya	•	•	-			46.11	46.50	90.13	29.16	27.67	9,200	17.75
Japan .	•	٠	•	-		9.22	4,5	6.0	9	18.48	;	:
France, .	**	•	-	•	250	1.20	5,0	98.6	and in		***************************************	:
Other Countries			•			他介		7	·			
		ŧ		l								
•,		TOTAL	AL.	•	26,680	56.73	57,838	112.45	39,227	76.32	9,200	17.75
			,	I				7				

٠.
*
~
D.
L 3

U.K	•	•	•	•	•	2,769	4.67	41,512	71.43	37,074	63.28	10	0.02
Kenya.	•	٠	•	•	•	4,229	9.40	19	0.04	14	0.04	:	:
Bulgaria .	•	•	•	٠	•	2,414	5.19	10,586	19.39	10,214	17.64	2,667	4.68
Rumania .	•	• •	•	•	٠	:	:	:	:	6,196	10.99	960'9	10.88
Poland.	•	•	•	•	٠	:	:	5,032	8.74	5,074	8.47	•	:
China	•	•	•	. •	•	5,895	10.18	6,921	12.72	5,080	8.49	:	:
U.S.S.R.	•	• '	•	. •	•	:	:	2,491	4.30	5,430	9.07	:	:
Other Countries	 8	•	•	. •	• '	स	0.01	2	0.03	:	•	2,413	4.20
			É	TOTAL	•	15,308	29-45	66,563	116.64	69,082	117.98	11,186	19.78
Others:	٠				'	नयने			h				
U. K	•	•		•	•	116	0.28	595	1.05	559	1.17	:	:
Kenya .	•	•	•	•	•	8,039	17.29	1,016	2.07	12	0.03	11	0.03
Bulgaria .	•	•	,	•	•	: ~	:	9	0.01	;	:	:	:
Japan .		•	•	٠	•	1,524	3.18	1,519	3.02	:	:	:	:
China .	•	•	•	•	•	:	:	1,039	1.69	:	:	:	:
Other Countries	٠. د	•	•	•	•	3	0.04	11	0.17	:	:	;	:
			Ĭ	TOTAL	•	9,682	20.79	4,183	8.01	571	1.20	11	0.03

ш			-		-	7	e	4	80	9	7	∞	6
 - -							/						
Summary: U.K.	•	•	•	•	٠.	2,989	5.15	42,131	72.50	37,718	64.67	10	0.05
Kenya.	•		•		•	33,721	72,80	47,536	92.24	29,195	57.69	9,211	17.78
Bulgaria .	•	•`	•	•		2,414	5.19	10,589	19.40	10,214	17.64	2,667	4.68
Rumania .	•	·	•	•	:	祖			0	6,196	10.99	960'9	10.88
Poland	•		•			यमे		5,032	8.74	5,074	8.47	:	:
Japan .	٠	•		٠	•	960'9	12.40	6,075	12.06	9,973	18.48	:	:
China .	•	•	٠.	•	٠.	5,895	10.18	7,966	14.41	5,080	8.49	:	· :
U. S. S. R.	•	•	•	•	٠.	:	:	2,491	4.30	5,430	9.07	:	:
France.	•	•	•	•	٠.	550	1.20	5,080	9.84	:	:	:	:
Other Countries	` •		•	•	•	'n	0.05	1,690	3.61	:	:	2,413	4.20
!			Total	님	1	51,670	106.97	128,584	237 · 10	108,880	195 · 50	20,397	37.56

(Source: Statistics of Foreign Trade of India).

APPENDIX V

(Vide paragraph 12)

Statement showing c. i. f. prices and landed costs of latest imports of soda ash.

								(Rs. per tonne)
SI. No.	Source of information	Origin of import	Date of import	C.i.f. prices	Customs	Clearing Charges	Landed	Remarks
-	2	6	4	5	9	7	.∞	6
		ह्यमेव	A. Light Soda Ash.	oda Ash.	J-50			
-	1. The Collector of Customs, Calcutta	Bulgaria	Jan. 61	171.05	113.20	6.87	291.12	
		Rumania	Jan. 61	174.99	113.20	6.87	295.06	
		Rumania Jan.	Jan. 61	176.76	113.20	6.87	296.83	
7	2. State Trading Corporation of India, Delhi	Bulgaria	Jan./ March 61	173.87 C. & F. Calcutta.	113.20	:	:	
		Rumania	Rumania Jan./ March 61	127.95 (F.O.B.)*	113.20	:	:	
3.	3. Imperial Chemical Industries (India) Pvt. Bulgaria Jan.	Bulgaria	Jan. 61	174.87	113.20	10.52	298.59	
	Liti, Calculla.	Rumania	Feb. 61	178.78	113.20	10.34	302.32	

₩	2	en .	4		5	9	7	∞	6
4.	4. Tata Oil Mills Co., Ltd., Bombay .	Bulgaria	Jan.	61	174.87	113.20	9.59	297.66	
		Rumania	Feb.	61	178.78	113.20	9.45	301.43	
5.	5. India United Chemical Distributors Ltd., Calcutta.	Bulgaria	Jan.	61	175.00	113.20	10.10	298.30	
		Rumania	Feb.	61	178.80	113.20	10.32	302.32	
		स्यमे	В. Не	eavy S	B. Heavy Soda Ash.				
	1. Collector of Customs, Bombay	Kenya	June 61	61	192.82	103.70	8.00	304.52	
7	Collector of Customs, Calcutta •	Japan	June	61	178.53	133.20	6.75	318.48	
		Kenya	Feb.	61	183.85	83.70	6.85	274.40	
			March 61	61	188.97	103.70	6.75	299.40	
m,	3. State Trading Corporation of India, Delhi	Kenya	Jan./ June	61	193.54	103.70	:	:	
		Japan	April/ June	- 20 - 20 - 30 - 40	181.82 (C. & F., Calcutta/ Bombay)	133.20	:	:	

291.55	286.74	305.56	311.44	310.69	310.76	321.26
83.70 15.75	10.98	10.00	15.75	15.00	15.00	6.94
	83.70	103.70	103.70	103.70	103.70	133.20
192.10	192.06	191.86	191.99	191.99	192.06	181.12
Feb. 61 192.10	March 61	March 61	April 61	May 61	June 61	June 61
Kenya						Japan
 Imperial Chemical Industries (India) Pvt. Kenya Ltd., Calcutta. 						5. Chemical & Alkali Distributors, Bombay. Japan June 61 181.12
Imperial Chemical In Ltd., Calcutta.						Chemical & Alkali
4						5.



GIPN-S3-8 T.C.Bom./61-29-3-62-580



सन्यमेव जयते