

**COMMITTEE ON PUBLIC  
UNDERTAKINGS  
(1975-76)**

**(FIFTH LOK SABHA)**

**EIGHTY-FIRST REPORT**

**Action taken by Government on the recommendations contained in the Sixty-Seventh Report of the Committee on Public Undertakings (Fifth Lok Sabha)**

**on**

**FERTILIZERS AND CHEMICALS, TRAVANCORE  
LIMITED**

**(Ministry of Chemicals and Fertilizers)**



**LOK SABHA SECRETARIAT  
NEW DELHI**

*February 1976/Phalguna, 1897 (Saka)*

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CONTAINED IN THE SIXTH SEVENTH REPORT  
OF THE COMMITTEE ON FERTILIZERS AND  
CHEMICALS, TRAVANCORE LTD.

....

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
1	1.4	1	not	now
3	1.11	3	aluminum	aluminium
4	1.14	3	<u>for existing line read</u> "to the setting up of a dry-ice plant as recommended by the Com-"	
7	1.24	2	<u>insert</u> "to" after "-ed"	
8	1.28	5	delete existing line	
12	1.46	last	Rs.80.75	Rs.30.75
14	1.52	5	Shri A.H. Kurien	Shri A.J. Kurien
16	1.59	5	recommend	recommended
23	S.No. 5	8	<u>insert</u> "and with certain modifications the efficiency" <u>after</u> "efficiency".	
23	-do-	9- 10	attached	attained
24	2nd	5	percentage	percentages
24	-	-	<u>insert</u> a foot note "Not vetted by Audit"	
26	-	1	Paragraph 3.609	Paragraph 3.69
29	-	7	Delete asterisk mark	
29	-	8	various	variance
29	-	12	<u>insert</u> asterisk mark after the word "Government"	
31	-	10	plans	plants
34	-	-	<u>delete</u> footnote	
40	-	4	the	to
43	2nd	9	now	low

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
44	-	2	Department	Development
45	last	4	plan	plant
47	-	1	trials	trial
47	-	4	statutory	statutorily
48	1st	last	got	get
		but		
		one		
51	3rd	4	amounting	mounting
53	last	2	<u>delete</u> "for"	
	but			
	one			
56	2nd	2	private	provide
57	1st	7	coke-over	coke-oven
59	-	6	Plan	Plant
61	-	7	funds	finds
		from		
		- tton		
69	2nd	6	Cooperation	Operation
70	-	14	he	the
76	3rd	3	include	included
77	-	2	absobte	obsolete
77	-	last	Rs.80.75	Rs.30.75
		but		
		one		
79	2nd	5	Shri A.H.	Shri A.J.
			Kurien	Kurien
79	3rd	2	srevices	services
86	3	1	<u>insert</u> "of" <u>after</u> "deter-	
			mination"	
94	(vi)b	1	repaid	repair
47	-	12	basis	cases

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**COMMITTEE ON PUBLIC UNDERTAKINGS**  
**(1975-76)**

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**SECRETARIAT**

**Shri M. A. Soundararajan—Chief Financial Committee Officer.**

**Shri K. S. Bhalla—Senior Financial Committee Officer.**

**ACTION TAKEN SUB-COMMITTEE OF THE COMMITTEE ON  
PUBLIC UNDERTAKINGS**

**(1975-76)**

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5. Shri C. K. Jaffer Sharief
6. Shri Damodar Pandey
7. Shri Atal Bihari Vajpayee

## INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to submit the Report on their behalf, present this Eighty-First Report on Action Taken by Government on the recommendations contained in the Sixty-Seventh Report of the Committee on Public Undertakings (Fifth Lok Sabha) on Fertilizers and Chemicals, Travancore Ltd.

2. The Sixty-Seventh Report of the Committee on Public Undertakings was presented to Lok Sabha on the 30th April, 1975. The replies of Government to all the recommendations contained in the Report were received in batches and the last batch was received on 17th January, 1976. Further information in respect of two recommendations was called for from the Ministry of Petroleum and Chemicals on 22-10-75 and was received on 29-10-75. The replies of Government together with the draft Report were considered by the Committee at their sitting held on the 27th December, 1975 and the Chairman was authorised to finalise the Report and present it to Parliament.

3. The Report has been divided into the following three Chapters:

- (i) Report.
- (ii) Recommendations that have been accepted by Government.
- (iii) Recommendations which the Committee do not desire to pursue in view of Government's replies.

4. An analysis of the Action Taken by Government on the recommendations contained in the Report of the Committee is given in Appendix VII. It would be observed therefrom that out of the total number of recommendations made in the Report, 67.5 per cent have been accepted by the Government. The Committee do not desire to pursue 32.5 per cent of the recommendations in view of the Government's replies.

NEW DELHI;  
March 10, 1976.  
Phalguna 20, 1897 (S).

NAWAL KISHORE SHARMA,  
Chairman,  
Committee on Public Undertakings.



## CHAPTER I

### REPORT

This Report of the Committee deals with the action taken by Government on the recommendations contained in the Sixty-Seventh Report (Fifth Lok Sabha) on Fertilizers and Chemicals, Travancore Ltd., which was presented to the Lok Sabha on the 30th April, 1975.

1.2. Action Taken Notes have been received from Government in respect of all the 37 recommendations contained in the said Report.

1.3. The Action Taken Notes on the recommendations of the Committee have been categorised as follows:—

- (i) Recommendations/Observations that have been accepted by Government:—

Serial Nos. 2, 3 and 12, 4, 5, 6, 7, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 26, 27, 28, 30, 32, 33, 34 and 37.

- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:

Serial Nos. 1, 8, 9, 10, 11, 17, 24, 25, 29, 31, 35 and 36.

1.4. The Committee will not deal with the action taken by Government on some of their recommendations.

#### *A. Cryolite Plant and Dry Ice Plant*

#### **Recommendations (Serial Nos. 18 and 19)**

1.5. The Committee noted that in order to perfect a process developed by the R&D Division for recovering fluorine from phosphate fertilizers in the form of synthetic cryolite, which was a very valuable chemical required for aluminium industry, the FACT after taking the approval of Government in principle, set up a plant at a cost of Rs. 32 lakhs for producing 1650 tonnes of cryolite per annum.

1.6. It was reported that cryolite was being imported and this would be a substitute for the imported cryolite. The Chairman-cum-Managing Director informed the Committee during evidence.

that the development of this process was discussed with the Government of India and their 'general' approval obtained. It had been admitted by the Chairman-cum-Managing Director that no specific study about the demand for the product in the country was made. It was assumed that generally the market was there. It was also admitted by the Chairman-cum-Managing Director that when the project was taken up, there was no firm and fixed specification available for the product and whatever FACT was hoping to produce would be acceptable to the Industry. The Committee were surprised that such a 'general' approval was given by Government without any survey of the demand for the product or an examination of the economics of the project.

1.7. The Committee were informed that, on actual production on a bigger scale, the silica content was found to be more than what was acceptable to the industry and therefore FACT made some improvements to reduce the silica content and had given the improved product to an aluminium firm for trial the results of which were awaited. The Committee were also informed that since a fair amount of success was achieved at laboratory scale, FACT did not seek the support of research laboratories. The Secretary of the Ministry admitted during evidence that "what still remains to be done is that the quality of the product should be improved in consultation with aluminium manufacturers." He also admitted that "instead of a bigger plant it should have been a smaller plant." The Committee did not appreciate the undue haste with which the FACT went about setting up the plant on such a big scale and started production of cryolite without making a demand survey of the product and without finalising the specification of the product to suit the needs of aluminium industry.

1.8. The Committee recommended that Government should investigate into the matter and fix responsibility for this unnecessary capital investment and recurring expenditure thereon to which the FACT had been put. The Committee recommended that at least now the FACT should in consultation with Public Sector enterprises like the Bharat Aluminium Company settle the specifications for this product and the requirements for aluminium industry before going in for large scale production.

1.9. The Committee also recommended that research institutes like National Metallurgical Laboratory of the CSIR might also be consulted in order to perfect the process for product improvement.

1.10. In their reply Government stated that Government would investigate into the circumstances in which an investment was made on the cryolite plant. The Committee's other recommendations regarding consultation with public sector units to settle the specifications of this product and requirements of the aluminium industry and Research Institutes in order to perfect the process for product improvement have also been noted for action.

1.11. On an enquiry of the Committee as to what concrete steps had been taken to settle the specifications of cryolite to suit the requirements of the aluminium industry, the Government informed that the Company's R&D Division had undertaken a study for improving the quality of product. A new technique was developed and samples of the product, obtained after carrying out modifications to the plant, were sent to Bharat Aluminium Company and other leading manufacturers for analysis and comments. The response of the manufacturers had been favourable and one of them had also asked for a larger quantity of the product for extensive trials.

1.12. In regard to Dry Ice Plant the Committee noted that in its anxiety to utilise the surplus carbon-dioxide recoverable from the oil gasification plant at the end of III stage expansion, the FACT set up a dry ice plant in May, 1969 at a cost of Rs. 8.15 lakhs, to produce six tonnes per day of dry ice without a proper demand survey and without taking into account the full effect of excise duty on the price structure of the product. It was envisaged that the dry ice would be used by the local fishing industry. The Committee were informed that due to the excise duty leviable on dry ice being high and due to the fact that the use of dry ice in fishing industry called for a new method involving additional expenditure, whereby the dry ice would not come into direct contact with fish, the price of the dry ice did not prove to be economical to the fishing industry. The result of all this had been that the plant could not go into commercial production till now. The Committee were surprised to find that "the Management is not able to locate a copy of the report" submitted by an officer of the Corporation on the basis of which this project was taken up. It had been admitted by the Chairman-cum-Managing Director of the Undertaking that the entire expenditure on the project "is a waste". The Secretary of the Ministry had also admitted that the project had gone wrong because of one vital omission viz., absence of a thorough market study. The Committee desired the entire matter to be thoroughly investigated with a view to fixing specific responsibility for the lapses and taking deterrent action. The Committee desired to be informed of the precise action taken in pursuance of it.

1.13. The Committee were informed that the FACT was now exploring the possibilities of Marketing the dry ice in Bombay, which again was running into difficulties due to the transport problems. The Committee wanted Government/FACT to come to an early conclusion, as to whether this plant could at all be operated economically and if found otherwise, take an early decision to dispose of the plant in the best interest of the Undertaking. The Committee wanted to be informed of the action taken in pursuance of this recommendation within three months.

1.14. In their reply Government stated that Government had decided to constitute a group to enquire into the matter relating in recommendations 4, 18 and 22. The composition of this committee. This group would also investigate into the matters covered in recommendations 4, 18 and 22. The Composition of this committee would be communicated to the Committee on Public Undertakings early.

1.15. As regards second para of the recommendation, FACT management had stated that efforts made to market and distribute dry ice in Bombay had not been successful. This was because the consumers at Bombay require delivery at very short notice, normally within a few hours. Even if the dry ice was transported by air, the flight timings and the transit time may not always admit of this consumer requirement being met in time. In addition, the material had often to be stored overnight because of the timing of the flights. The losses in transport could also be very heavy.

1.16. In view of these problems in marketing dry ice the FACT management was of the view that the plant/equipments should be put to alternative use or disposed of to best advantage. Necessary action was being taken by FACT in this regard.

1.17. On an enquiry from the Committee as to what was the final decision of the Management in regard to disposal of the Dry Ice Plants, the Government replied that the company was exploring the possibility of using plant and equipment forming part of the dry ice plant in its other facilities. As soon as the exercise undertaken in this regard was completed, the company would take action for disposal of equipment which could not be put to other profitable use in the company itself. In a further reply Government stated that Government had further examined the matter and it was pro-

posed to have the matters covered by recommendations at S. No. 4, 18, 19 and 22 investigated internally in the Ministry. Thereafter, such further action as is necessary would be taken.

1.18. Although the Government have accepted the recommendations in principle, the Committee find that the action has not so far been initiated to implement the recommendations. The Committee recommend that Government should take action to investigate the matter without any further delay and report the result of the investigation to Parliament.

### *B. Ambalamedu House*

#### **Recommendation (Serial No. 22)**

1.19. The Committee noted that the FACT constructed one hotel and another building (Ambalamedu House) for accommodating foreign technicians and engineers, who were to come under agreements with foreign suppliers at a cost of Rs. 4.62 lakhs and Rs. 14.2 lakhs respectively and these were furnished at a cost of Rs. 1.11 lakhs and Rs. 1.4 lakhs respectively. The Committee noted that the maximum number of foreign engineers accommodated in the Ambalamedu House was only 20 and the occupancy ratio was decreasing from 35 per cent in 1971 to as low as 5 per cent in 1974 (upto August, 1974). The Committee were informed that according to the contractual obligation FACT had to provide for senior engineers first class hotel accommodation of international standards or equivalent and if the stay extended beyond six months of the original expected period, they had to be provide family accommodation. The FACT had to incur an expenditure Rs. 30,763 on hire charges of buildings taken on rent for the period October, 1968 to November, 1972. In the opinion of the Committee accommodation provided in the Ambalamedu House was excessive in view of the low level of occupancy, the FACT could have restricted the scale and type of accommodation to the actual number of foreign technicians and engineers expected to come under the agreement. The Committee recommended that Government should investigate the reasons for creating such large accommodation in excess of the requirements at a cost of over Rs. 15 lakhs and fix responsibility for the lapses. The Committee wanted to be informed of the action taken.

1.20. The Committee were informed that the FACT were exploring the possibility of accommodating the foreign technicians

under Cochin Phase II and also for utilising it as a hotel to meet the tourist requirements. The FACT was also stated to be entering into some arrangement with the Department of Tourism. The Kerala State Tourism Development Corporation was also stated to have evinced some interest. Since it was reported that no engineer connected with Cochin Phase II was staying in Ambalamedu House, the Committee recommended that FACT should intensify its efforts with the Department of Tourism/Kerala State Tourism Development Corporation and take suitable measures so that the Ambalamedu House could be put to more profitable use.

1.21. In their reply Government stated that as recommended by the Committee the Government would investigate into the construction of the Ambalamedu House. The company was actively exploring the possibility of putting the Ambalamedu House to profitable use.

1.22. The Committee would reiterate their earlier recommendation and urge that the investigation in this regard should be completed without further delay and Parliament informed of the results. The Committee also recommend that FACT/Ministry should intensify their efforts with the Department of Tourism/Kerala State Tourism Development Corporation and take suitable measures so that the Ambalamedu House could be put to profitable use.

### *C. FACT Engineering and Design Organisation (FEDO)*

#### **Recommendation (Serial No. 25)**

1.23. The Committee noted that the FACT Engineering Design Organisation (FEDO) was formed in 1964 as per decision of the Government of India taken in September 1963 to construct at least three complete fertiliser plants before the end of Fourth Five Year Plan (1966—71). In pursuance of this decision the organisation was gradually developed and it became a full-fledged division of FACT in 1966. But of the four fertiliser projects (Cochin, Madras, Mangalore and Tuticorin), for which the project reports were prepared by FEDO, only the construction and management of the Cochin Project was entrusted by the Government to the Undertaking in July, 1965, though it had undertaken planning, designing and construction of various other works since then by its own efforts. The Committee noted that the income of FEDO from engineering services had gone down from Rs. 103.64 lakhs in

1970-71 to Rs. 67.67 lakhs in 1973-74, and the profits of the organisation had also gradually decreased from Rs. 1.50 lakhs in 1970-71 to a bare Rs. 8,000 in 1973-74. As admitted by the Chairman-cum-Managing Director, though in the beginning FEDO had enough work-load, but of late FEDO "was coming to a low level of utilisation. We have got a few orders recently. We expect to get some fresh orders also. Probably we can get going in the next year. For the future it will depend on whether we could get more orders".

1.24. The Committee were informed that five projects estimated cost about Rs. 60 crores were being done by the FEDO. In addition, some jobs including diversification programmes were also being undertaken by the FEDO. The FEDO was also considering the feasibility of taking up design and engineering work for chemical industries other than fertiliser industry. It had been stated that FACT was considering the question of effecting economics in FEDO, taking all the factors into account. The Committee found that in addition to FEDO, the planning and development division of the Fertiliser Corporation of India, and the Engineers of India Limited were also engaged in design and engineering work for chemical and fertiliser industries. The Committee noted that when the FEDO was originally conceived, it was contemplated that this organisation would specialise in the design, engineering, construction and erection of ammonia plants based on naphtha as feed stock as also, the plants for production of items like sulphuric acid, phosphoric acid and phosphate where as the Planning and Development Division of the FCI would concentrate their efforts in the field of other feed stock, ammonia synthesis, manufacture of urea, etc. Although fertiliser capacity in the country was being developed to bridge the gap between demand and supply to cover the increased requirements and a number of plants were being set up based on different feed stock, according to Government there would be limitations in the different design and engineering organisations developing well defined areas of specialisations with different feed stocks. However, it had been agreed by the Ministry that all efforts were required to ensure that facilities available with the different design and engineering organisations were utilised to best advantage and at the same time get the benefit of alternative technologies. The Committee, therefore, recommended that Government|FACT should examine the economics of continuing this organisation with reference to the utility of the organisation and the volume of work to be handled by it and take a decision soon.

1.25. The Committee found that there were number of consultancy design and engineering organisations in the field. The Committee felt that there was need for Government to examine in depth and decide the scope and area of consultancy of the different design and engineering organisations. The Committee recommended that a high powered Expert Committee should be set up to review the role scope and area for consultancy, design and engineering in the fertiliser industry in public sector so that the existing expertise and the resources were utilised to the best advantage of the country. The Committee wanted to be informed of the report and the action taken thereon within six months.

1.26 In their reply Government stated that they were constituting a High Powered Expert Committee to review the role, scope and area for consultancy design and engineering in the fertiliser industry in the public sector so that the expertise available with the different design and engineering organisations in the public sector was utilised to the country's best advantage. In the light of the Expert Committee's recommendations the role, set-up and other aspects relating to FEDO will be examined.

1.27. The Committee would like the Government to apprise Parliament of the recommendations of the High Powered Expert Committee constituted to review the role scope and area for consultancy design and engineering organisations in the fertilizer industry together with the action taken on the recommendations of the High Powered Committee.

#### *D. Sale of Oxygen*

##### **Recommendation (Serial No. 29)**

1.28. The Committee noted that the agreement entered into by FACT with M/s. Southern Gas Limited for sale of oxygen provided that irrespective of the actual off-take the party would be billed for a minimum quantity of 56,630 CM per month. The actual off-take a minimum quantity of 56,630 CM per month. The actual oq-take by the party from the commencement of supply to 31st March, 1970 was substantially lower than the minimum quantity and the Value of the short-fall was Rs. 5.6 lakhs. Even after 31st March, 1970, every year there had been shortfalls and from 1970-71 to 1973-74 the quantity of short-fall was 14.78 lakh c.m. valued at Rs. 5.4 lakhs. When the FACT billed for the amount, according to the agreement, the party had not so far paid the amount on the ground of (a) poor



quality of the product, (b) force majeure conditions, (c) failure of the FACT to supply minimum quantity. The Southern Gas Limited contended that since FACT failed to supply oxygen and therefore, for such periods of failure no minimum guarantee was payable. It was also admitted by FACT that though the quality of gas suffered before November, 1967 FACT was able to maintain the purity thereafter. There were limitations in the supply prior to June, 1973 as FACT was requiring the oxygen for its own plants. The Committee were informed that the question was being examined in consultation with the FACT's attorneys and it was expected that a settlement would be reached by making due allowances for the period during which either party was not able to fulfil its obligations. If mutual agreement was not reached, it was stated that the matter would be settled by arbitration. The Committee wanted to be informed about the settlement. The Committee, did not find any justification for FACT entering into long term contract for 30 years at a stretch without even an escalation clause and with terms and conditions which FACT could not enforce especially when other parties were able to offer better prices. The Committee were not sure whether financial implications of such a long-term commitment had been examined in depth keeping in view the utilisation of the capacity of the FACT plants and the cost of production. The Committee recommended that this matter should be thoroughly examined from all aspects and the Committee informed of the results.

1.29. In their reply Government stated that the company was negotiating a settlement with M/s. Southern Gas. The company was being advised to settle the matter at the earliest by mutual negotiations or arbitration. The company was also being asked to critically re-examine the financial and other aspects of a long-term contract with M/s. Southern Gas.

1.30. The Committee would like this issue to be settled with M/s. Southern Gas early. They would also like to reiterate that the financial implications of such a long term commitment should be thoroughly examined and Parliament informed of the results.

#### *E. Costing System and Analysis of Cost*

##### **Recommendation (Serial No. 32)**

1.31. The Committee noted that FACT was following the system of standard costs which were fixed in 1966 on the basis of designed  
2393 L.S.—2.

capacities of the plants and the ratios of the consumption of raw materials as also stream efficiency of 330 days in a year. The Committee noted that the Standard costs were revised only in March, 1971 after taking into account the attainable stream efficiency of 317 days although the attainable stream efficiency was indicated by the Sharma Committee as early as April, 1968. The result was the standard cost during the intervening period between 1968 to 1971 did not serve as the correct basis for judging the efficiency of operations.

1.32. It was clarified that the revision of standard costs was made not only with reference to stream efficiency indicated by the Sharma Committee but also after standardising the norms of consumption ratios.

1.33. The Committee noted that the actual cost of production of different products except superphosphate and Sulphuric Acid was higher than the revised standards costs and the actual costs ranged from 121 per cent to 167 per cent of the revised standard costs during 1971-72 to 1973-74.

1.34. An analysis of the variations in costs during the period 1971-72 to 1973-74 indicated that there had been huge variations between the actual fixed and variable cost over the revised standard costs while the increase in the variable costs were attributed to increase in price of raw materials, packing materials and increase in price of Intermediate products, the increase in the fixed cost were mainly due to lower volume of production. The Committee found that though the increase in variable cost had been mostly attributed to increase in the cost of raw materials, there had been variances due to usage also thus indicating excessive consumption.

1.35. The Committee were informed that every month a variance report was prepared on the basis of information received from production Departments and circulated to Plants for action. The Committee recommended that the management should introduce a system of analysis of the variance reports with a view to identifying the causes for such variances and taking suitable remedial measures in time.

1.36. The Committee found that inspite of the recommendation in paragraph 3.33 of their 44th Report (4th Lok Sabha) that it would be useful for a Public Undertaking to have comparative figures from other undertakings in the same industry on various aspects of their working, so far no system had been introduced to have a regular

exchange of information. The Committee recommended that the Bureau of Public Enterprises should devise ways and means of introducing such a system for the benefit of the Public Undertakings.

1.37. In their reply Government accepted the recommendation. The FACT was taking action to analyse the variances, along with the remedial measures needed.

1.38. As regards para 10.40, BPE had already taken up a project on inter firm comparison between fertilizer industries in the public sector. This project also included certain units in the private sector.

1.39. The Committee would reiterate their earlier recommendation that the Bureau of Public Enterprises should devise ways and means of introducing a system of regular exchange of information amongst the Public Undertakings for their benefit.

#### *F. Inventory Control*

#### **Recommendation (Serial No. 35)**

1.40. The Committee noted that the inventory of stores had shown a decrease from Rs. 15.29 crores as at the end of 1970-71 to Rs. 8.85 crores on 31st March, 1974. The value of spares included in the inventory however showed an increasing trend from Rs. 108 lakhs. representing 42.8 months consumption as on 31-3-71 to Rs. 185 lakhs. on 31-3-74 representing 71 months consumption. Even with reference to cost of machinery, the percentage of spares has indicated an increase from 6.2 per cent to 7.9 per cent. The Committee were informed that the records were not maintained to indicate the spares received with plant and machinery as distinct from those purchased later. Although the management had not considered it necessary to do so, the Committee felt that in the interest of regulating purchase of spares such a segregation was essential. The Committee hoped that action would be taken to segregate the spares accordingly.

1.41. The Committee noted that out of 31,149 items on stock on 31-3-70 minimum limits had been fixed only in respect of 2,500 items. The Committee were informed that an Inventory Control Committee was formed to fix the maximum and minimum levels for all store items. This Committee had finalised the work relating to identification of obsolete and surplus stores and the other work was to be taken up.

1.42. The Committee understood that a Review Committee appointed by the Chairman-cum-Managing Director identified value of obsolete and surplus stores on 30th September, 1970 as 20.83 lakhs.

1.43. The value of such surplus and obsolete items had been reduced to Rs. 12.34 lakhs. The Committee were informed that the Inventory Control Committee were reviewing 'A' Value items to fix the maximum and minimum limits and also to locate the surplus. The Committee recommended that the Inventory Control Committee should finalise its work soon and management should fix the maximum and minimum limits for all the stores without delay. The management should take action to circulate the list of surplus stores to all the public undertakings including fertilizer producing units with a view to disposing the surplus items.

1.44. The Committee also noted that the percentage of items physically verified to the total number of items in store was 20.93 per cent on 31-3-71, 32 per cent on 31-3-72 and 29.82 per cent on 31-3-73. The Committee regret to note that the value of items verified in any year is not available. The Committee were surprised that the discrepancies noticed as a result of verification had also been not adjusted in accounts from 1968-69 to 1972-73. The Committee however noted that in respect of 8,229 items verified during 1972-73 and 17268 items verified during 1973-74 there had been shortage to the extent of 1,047 items of value Rs. 9.76 lakhs in 1972-73 and 154 items valuing Rs. 3.77 lakhs in 1973-74 respectively. The Committee are informed that the Management was assessing the reason for the shortages. The Committee desired the management to investigate into the reasons for the shortages and fix responsibility therefor, and that they should be informed of the results.

1.45. The Committee also found that in regard to raw materials, sulphur and rock phosphate, the inquiry made by a Committee of Directors revealed shortages of stock of sulphur and rock phosphate valued Rs. 113.53 lakhs during 1969-70 and 1970-71 out of which shortages of value Rs. 46 lakhs were written off, and that the Government handed over the case to the Central Bureau of Investigation for inquiry. The Committee desired to know the findings of the inquiry and the action taken by the management in pursuance thereof.

1.46. The Committee noted that as a result of review by a departmental Committee in May, 1970, 8,700 items of stores and spares valued at Rs. 80.75 lakhs out of 30,596 items of stores and spares of

value of Rs. 336 lakhs were reported to have not moved for 5 years or more.

1.47. Out of these slow moving stores, it had been reported that stores valued at Rs. 21.34 lakhs were declared obsolete by the same Committee. Even after the sale of some stores at a loss of Rs. 1.74 lakhs, there were still obsolete stores worth Rs. 18.58 lakhs. In regard to stores other than machinery stores and general stores another departmental committee was reported to be going into the question and its report was awaited. It is unfortunate that no time limit had been fixed for completion of the work by this Committee. The Committee on Public Undertaking recommended that the Departmental Committee should be required to complete its work soon, identify items of surplus obsolete stores other than machinery stores and general stores so that management can take action for disposal of such stores by diverting them usefully to other public undertakings.

1.48. The Committee were of the opinion that the maintenance of store accounts and the inventory control in FACT had not been quite satisfactory. It was surprising that even the elementary requirements of fixation of maximum and minimum limit of stores for purposes of control had not been taken care of. No action had been taken in respect of results of physical verification and there had been accumulation of obsolete and surplus stores resulting in blocking up of capital. It is only in 1973 that the management had thought of the Inventory Committee to revamp the whole system. The special audit conducted in regard to stores had also revealed a number of irregularities. The Committee recommended that Government/FACT should critically examine the reasons for this state of affairs and take into account the results of investigations by special audit and the suggestions given by them so that the entire store system could before long be put in proper order.

1.49. In their reply Government stated that the company had already taken action to segregate the spares and it is understood that, except for a few items, spares have been segregated in Udyogamandal and Cochin.

1.50. Action was also on hand for fixation of norms for arriving at the maximum/minimum levels for spares taking into account the consumption statistics and the lead time. This was likely to be completed by end June 1976. In regard to surplus stores, detailed lists were, as recommended by the Committee, being circulated by the company among other fertilizer producing units in the Public Sector.

1.51. The management appointed a committee to examine the reasons for the shortages in stores and fix responsibility therefor. The committee's finding was that the shortages and surpluses were the cumulative effect of transactions spreading over a period from 1965-66 onwards and that these were within reasonable limits. On the recommendation of this committee, the shortages have been written off by the Company's Board as losses. The Committee was also of the view that it was not feasible to identify the reasons for the shortages/surpluses. The Committee was separately taking action to fix maximum and minimum levels for inventory items.

1.52. In regard to the shortages in the stock of sulphur and rock-phosphate brought out by the Special Audit carried out in 1972, departmental action was initiated against the following six officers of the Company:—

1. Shri A. H. Kurien
2. Shri M. P. Narayana Pillai
3. Shri P. E. Thomas
4. Shri J. Ramachandran Nair
5. Shri P. N. Menon
6. Shri V. Sankaranarayanan

Of the above officers, Shri Kurien and Shri Narayana Pillai had since resigned from the services of the company. According to terms and conditions of their appointment, these officers could leave the services of the company three months after tendering their resignations. The resignations of these officers were accepted after consulting CVC. Action in respect of the other four officers had since been completed, and with the approval of Central Vigilance Commission, two of them viz. Shri P. E. Thomas and Shri J. Ramachandran Nair have been exonerated.\*

1.53. In regard to the then Managing Director and the then Finance Manager, who have since reverted to their parent cadres, the advice of the CVC, based on the recommendations of the CBI, had been conveyed to the respective cadre authorities for initiating appropriate departmental action.

1.54. The Company had now streamlined procedures for inventory control and was taking action to put the entire store system in

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\*At the time of actual verification the Ministry of Chemicals and Fertilizers intimated that the nature of penalty in respect to the other two officers is being decided.

proper, order. A system of physical verification of inventory to be completed within a cycle of two years, had been introduced. The occurrence of obsolescence and surplus being a continuous phenomenon, an Officer on Special Duty had been placed in position to identify such obsolete and surplus items on a continuous basis and take steps for their speedy disposal.

1.55. The Committee regret to observe that though the management appointed a Committee to examine the reasons for shortages in stores and fix responsibility therefor, that Committee was of the view that it was not feasible to identify the reasons for shortages/surpluses. According to that Committee the shortage and surpluses were the cumulative effect of transaction from 1965-66. The Committee are constrained to observe that lack of proper inventory control right from 1965-66 has led to this situation.

1.56. The Committee recommend that the Management should expedite the fixation of maximum and minimum levels for inventory items in the interest of efficient store management.

1.57. The Committee are surprised to find that when cases were under investigation departmentally, two officials connected with the enquiry were allowed to resign and leave the undertaking. The Committee on Public Undertakings have already commented on this practice in para 8.74 of their Fiftieth Report (5th Lok Sabha) on Fertilizer Corporation of India Ltd. (Marketing and Distribution). They would like that Government should investigate as to how officials concerned in this case, against whom departmental action had been initiated for shortages in the stock of sulphur and rock phosphate, were allowed to resign without being conclusively called to account. The Committee would like Government to plug loopholes in rules and procedures which allowed them leave the undertaking in the midst of departmental action and thus escape accountability.

#### *G. Special Audit Report*

#### **Recommendation (Serial No. 36)**

1.58. The Committee noted that on the request of Ministry of Petroleum & Chemicals, a special audit (covering the period from 1st April, 1967 to 31st March, 1972) of high value items of stores and raw materials including sulphur and rock phosphate was conducted by associating technical members from the Ministry. The special

audit brought to light a number of deficiencies in the stores procedure and accounts.

1.59. The Committee were informed that the management was taking action on the observation/suggestions of special audit. The Committee recommended that the management should finalise action on all the points and furnish a report of compliance. The Committee also recommended that the FACT should streamline the procedures of purchase and store accounting, adopt modern methods of inventory control and take suitable measure to ensure that the defects pointed out do not recur. The Committee emphasised the need for scientific assessment and proper accountal of sulphur and rock phosphate which were obtained through imports after expending huge foreign exchange. Since these materials were received in boats, there should be regular pre-shipment and after-shipment surveys to ensure that the quantities loaded were actually received. The Committee wanted that the FACT should consider the matter and take suitable precaution to see that no portion of the rock phosphate was washed away due to lack of adequate storage facilities.

1.60. The Committee were distressed to note that the management went on certifying the book balances for purpose of annual accounts in spite of the wide differences between the actuals and the book figures without investigating into the shortages. They wanted that this should be specially investigated and the responsibility for this lapse noted.

1.61. The Committee desired that the internal audit should also as a part of their work conduct a regular check of the store accounts and the working of systems and procedures, bring the defects and deficiencies to the notice of top management for remedial action. The Committee recommended that Government should keep a careful watch on the implementation of the suggestions given in the special audit reports and ensure that such irregularities did not recur. The Committee also recommended that for purposes of uniformity in the procedure for accounting of sulphur and rock phosphate which were the main raw materials in the manufacture of fertilizer, Government should consider issuing suitable instructions in the matter and review from time to time the implementation of these instructions. The Committee wanted that the Central Vigilance Commission to expedite the matter and FACT/Ministry should communicate the results of investigations and the action taken in this and all other matters enquired into by CBI.



1.62. In their reply Government said that as intimated to the Committee, the company was taking action on the observations and recommendations of the special Audit. The Company had been asked to draw up a time bound programme for the implementation of the various recommendations of the special audit and place a status report every month before the Board of Directors and also before Government so as to enable the Board/Govt. to monitor the action being taken.

1.63. Action was also on hand to strengthen the Internal Audit so as to enable the unit to make a satisfactory check of stores accounting and the working of other systems and procedures.

1.64. In regard to the responsibility for shortages, as the Committee was aware, the matter was investigated into by the CBI. On the basis of the report of the CBI and subsequent recommendations thereon by the Central Vigilance Commissioner, departmental action was initiated against the offices of the company found, *prima facie* to be responsible. As regards the then Managing Director and the then Finance Manager of the Company, who have since reverted to their parent cadres, the recommendations of the CVC have been conveyed to the respective cadre authorities for initiating appropriate departmental action.

1.65. In regard to the Committee's recommendation that uniform procedures for accounting sulphur and rock phosphate should be prescribed by Govt., a committee was being constituted to look into all relevant aspects and make suitable recommendations.

1.66. The Committee would like that the Committee appointed by the Government to look into the question of procedure for accounting sulphur and rock phosphate should complete its work soon and Government should apprise Parliament of the recommendations of this Committee and the action taken by Government on their recommendations. The Committee recommend that a report on the action taken on the observations/recommendations of the special Audit may also be made to Parliament.

1.67. The Committee would also like that Parliament may be informed of the nature of departmental action taken against the officers of the company and the then Managing Director and the Finance Manager in the light of the reports of the CBI and the Central Vigilance Commission.

## **CHAPTER II**

### **RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY GOVERNMENT**

#### **Recommendation Serial No. 2 (Paragraph 3.21)**

The Committee regret to note that in spite of the assurance given by the Kerala State Electricity Board that adequate power would be made available in time the trial runs for testing the capacities of the plants set up during the third stage expansion and the consumption ratios of raw materials and utilities, as provided in the agreements, could not be conducted due to non-availability of power at the appropriate time within the guarantee period, with the result that besides loss of production, the Undertaking could not claim the cost of replacement of defective parts from the suppliers but had to incur an expenditure of more than Rs. 8 lakhs for replacement of the defective equipments. The Committee further regret to note that in the absence of any formal agreement between KSEB and FACT, the latter was not able to claim any damages from KSEB for non-fulfilment of the assurance. The Committee would like to reiterate their earlier recommendation in Forty-Fourth Report (1968-69—4th Lok Sabha) that “no project or expansion of a project should be undertaken in future unless power supply is assured with a guarantee where it is to be supplied by another authority to the project.”

#### **Reply of Government**

The Committee's recommendations are noted. BPE have already issued necessary instructions to the various Ministries in this regard, a copy of which is enclosed. [See Appendix I]

[Ministry of Petroleum & Chemicals O.M. No. M-37012(2)/75-Ferts. III dated 15-11-75.]

#### **Recommendation Serial No. 3 (Paragraphs 3.29 to 3.31)**

The Committee note that the construction of the factory at Udyogamandal was started in August, 1944 and the plant having an annual capacity of about 44,500 tonnes of Ammonium sulphate went into production in August, 1948. The FACT undertook the expansion of existing capacity and creation of facilities of new production in two stages with the result that by December, 1962 plants for manu-

facture of Ammonia (39600 tonnes), Ammonium Sulphate (99000 tonnes), Ammonium Phosphate (33000 tonnes), Ammonium Chloride (8250 tonnes), Sulphuric Acid (97650 tonnes), Phosphoric Acid (8250 tonnes) and Super Phosphate (44550 tonnes) had been installed. Further expansion of these were undertaken in two more stages. The third stage of expansion was completed at a cost of Rs. 13 crores by October, 1966.

At the end of III stage expansion, the designed capacity available was Ammonia—77550 tonnes, Ammonium Sulphate 198000 tonnes, Ammonium Phosphate 132000 tonnes, sulphuric acid 26180 tonnes, Ammonium Chloride 24750 tonnes, Phosphoric Acid 41250 tonnes and Superphosphate 44550 tonnes. The Committee note that on the completion of III stage expansion, while the ammonia plant was expected to have a capacity of 260 tonnes of ammonia daily, (subsequently reduced to 235 tonnes) in order to reduce the power requirement it was stated that the requirement of Ammonia in the ammonia consuming plants was 271 tonnes, thus creating a shortage of 36 tonnes per day. On the other hand there was a surplus capacity in the Phosphoric acid plant. The Committee note that in order to remove the imbalances in Ammonia Plant and the phosphoric acid plants and to stabilise the production at an economic level, the IV stage expansion was launched in April, 1966.

The Committee were informed that while the imbalance in the capacity of Ammonia and the three ammonia consuming plants had been removed in the IV stage expansion by installation of additional capacity for ammonia, the FACT decided to use the surplus capacity of 35 tonnes of P205 in the manufacture of ammonia phosphate. The Committee regret to note that the imbalance in production and requirement of intermediate products still persists and there was deficiency of sulphuric acid because of which the plants could not be run to capacity. It was stated that when a proposal for setting up an additional sulphuric acid plant was put up to the Board, the proposal was deferred at the instance of Government on the ground that with the proposed expansion of Cominco Binani Zinc Smelter Plant, their by-product sulphuric acid would be available. The Committee were informed that the Kerala Government was interested in the Zinc Smelter Plant to be put up by Cominco Binani. Since the economic viability of the Zinc Smelter Unit depended on effective utilisation of sulphuric acid, the Kerala Government suggested to FACT to examine the utilisation of the acid and since that by-product acid was suitable to FACT, it was agreed to buy the acid from Cominco Binani. The latter, however, failed to give the assured supply with the result that FACT's programme of production fell

short of target. The question of availability, production and purchase of sulphuric acid have been dealt with in a subsequent Section of this chapter.

### **Recommendation (Serial No. 12 (Paragraphs 3.104 to 3.109))**

The Committee note that against the installed capacity of 746 tonnes per day or 246,000 tonnes per year of sulphuric acid which included four plants, two small plants of 68 tonnes each (22,440 tonnes per year), another of 160 tonnes (52,800 tonnes per year and the fourth of 450 tonnes (148,500 tonnes per year) the actual production during 1970-71, to 1973-74 was 1,25,193 tonnes in 1970-71, 1,61,932 tonnes in 1971-72, 1,18,749 tonnes in 1972-73 and 1,64,760 tonnes in 1973-74. The Committee are informed that while the 450 tonnes plant working to full capacity, 160 tonnes plant has not been operating to full capacity and the other two plants are too old to give the desired capacity, with the result that the ammonia capacity is only 650 tonnes per day or 2,14,500 tonnes per year and the requirements fell short by about 130 tonnes per day.

The Committee are informed that on account of the low utilisation of plants and as the full requirement was not being met, FACT had to purchase substantial quantities of sulphuric acid from M/s Cominco Binani with whom FACT entered into an agreement in 1967 effective till 31st December, 1971 to supply 30,000 tonnes of Sulphuric Acid per year. The agreement is stated to have been automatically extended for a further period of 5 years till 31st December, 1976. The Committee note that against the agreed quantity of 30,000 tonnes, the FACT purchased 16,936 tonnes in 1970-71, 16,501 tonnes in 1971-72, 19,279 tonnes in 1972-73 at an average price of Rs. 129 per tonne, Rs. 132 per tonne and Rs. 144 per tonne respectively, when the variable cost of production in FACT's own plant worked out to Rs. 129, Rs. 113 and Rs. 115 respectively.

The Committee feel that it should have been possible for FACT|Government to so provide in the agreement that if FACT's requirements were not met fully by their own plant, then they could buy from M/s. Cominco Binani. As FACT had detailed knowledge of the cost of manufacture of sulphuric acid in their own plants, it should have been possible for FACT|Government to ensure that the price paid was not higher than that it would have cost FACT to produce it themselves.

The Committee are also informed that when the proposal of setting up an additional plant for sulphuric acid, based on the requirements of acid in the IV stage expansion, was placed before the Board

in 1970 the proposal was deferred by the Board on the advice of Government in the light of prospective availability of acid from this firm.

The Committee find that as against the agreed quantity of 30,000 tonnes per year, the firm had been supplying only 16,936, 16301 and 19279 tonnes during 1970-71, 1971-72 and 1972-73 respectively. In view of this performance, the Committee are not able to appreciate the decision of the Board in 1970 to defer the setting up of acid plant or the action of the FACT in having extended the agreement automatically for 5 years. The Committee would also like to be informed of the reasons for which the FACT did not insist for the supply of the stipulated quality and in the event of the firm's failure to honour the commitment, why was no action taken against them.

The Committee feel that Government should set up an expert Committee including a representative of Ministry of Finance well-versed in costing to go into the question of the relative economics of producing sulphuric acid by modernisation/replacement of the old units in FACT or by purchase from any other unit already working in the area preferably in the public sector, which could supply this vital input on assured basis and on competitive rates to meet fully the production requirements of FACT.

### **Reply of Government\***

In the agreement between FACT and Cominco Binani it is stipulated that M/s Cominco Binani shall not divert any quantity of acid to any consumer other than FACT until the latter's requirement are fully met. The Agreement does not bind Cominco Binani Ltd. to make good any shortfall in the quantities contracted; nor does the agreement provide for a penalty clause. FACT have reported that as M/s Cominco Binani have in the past tried to fulfill the contractual obligations to the best of their abilities, FACT did not consider it necessary to take any further action in the matter.

Notwithstanding, FACT's position in this regard, the company is being asked to examine whether the contract with Cominco Binani should be renegotiated to provide for suitable penalty/compensation in the event of shortfalls in supply.

Also, as recommended by the Committee, the question of the relative economics of producing sulphuric acid by modernisation/replacement of the existing units in FACT or the purchase from other units in the area at competitive prices is being referred to a Commit-

tee of Directors to facilitate an Action Plan being drawn up for ensuring adequate and un-interrupted supply of the acid at economic price.

[Ministry of Petroleum & Chemicals O.M. No. M-37012/2/75-Ferts. III dated 21-11-75.]

**Recommendation (Serial No. 4, Paragraphs 3.39 and 3.40)**

The Committee note that the estimates for the Fourth Stage Expansion which was approved by Government in September, 1966 for Rs. 392 lakhs had to undergo three revisions—one in November, 1966 for Rs. 500 lakhs, second in May, 1969 for Rs. 575 lakhs and third in January, 1972 for Rs. 673 lakhs. The Committee, however, find that even after the last revision, the estimate is likely to be exceeded by another Rs. 5 lakhs. The actual expenditure upto 31st March, 1974 is already reported to be Rs. 673 lakhs. The increase has been mainly attributed to increase in finance and management expenses, increase in equipment cost and services. It was stated by the representative of the Ministry that the project was all the time under review and appropriate sanctions were issued at suitable times. The Committee would like Government to critically go into the reasons for the frequent revisions of the estimates and their effect on cost of production and economics of the project and bring these specifically to the notice of the Parliament.

The Committee note that although Fourth Stage Expansion was to be completed by October, 1968 the date was revised to August, 1969 (August, 1970 for Ammonia Plant). The Committee are informed that the Ammonia Plant was commissioned in October, 1971. The other plants were either not commissioned or the performance was not proved. It has been stated that in the case of 100 T.P.D., Ammonium Phosphate Plant, though modification was undertaken at a cost of Rs. 3.45 lakhs to produce 20:20 Ammonium Phosphate, the plant produced ammonium phosphate of that grade only upto June, 1970 after which it was being used for production of 16:20 grade only and it was not found possible to produce the 20:20 grade without improvements to equipments. The Committee are led to conclude that the expenditure on the modification to the existing 100 T.P.D. Plant to produce the 20:20 grade had largely proved to be infructuous. The Committee would like Government to investigate the matter and fix responsibility for the lapses. The Committee are also informed that the modification to the existing 300 T.P.D. Ammonium Phosphate Plant to produce 20:20 grade is being reconsidered in the context of the proposed rationalisation or diversification scheme. The Committee also find that even after completing the work of

modification of the Tonnex Plant, the increase in production attained was only 800 M<sup>3</sup>/hrs against the envisaged increase of 1000 M<sup>3</sup>/hrs. The Committee feel that the FACT was rushed to the Fourth Stage Expansion to set right certain imbalances and carrying out modifications without examining the full implications thereof. The Committee would like the entire scheme of Fourth Stage Expansion to be critically examined with a view to analysing causes for the failure of the different modifications undertaken by FACT. The Committee would like to be informed of the results of the investigation.

### **Reply of Government\***

The recommendation of the Committee contained in para 3.39 has been noted for action. Government would also investigate into the expenditure on the modifications to the existing 100 T.P.D. of the ammonium phosphate plant, as recommended by the Committee.

As stated in Government's reply to recommendation No. 17, a Committee has been set up to examine various aspects relating to the diversification programme including the economics thereof and the effect of diversification on the overall profitability of the unit. The Committee is also being asked to examine the entire scheme of Fourth Stage Expansion in the light of the Committee of Public Undertakings recommendations.\*\*

### **Recommendation (Serial No. 5, Paragraphs 3.53 & 3.54)**

The Committee note that the present daily designed capacities of the various plants were based on stream efficiency of 330 days. In the case of Udyogmandal Unit since the stream efficiency attained was very low, two Technical Committees examined the reasons for shortfall in production and suggested the remedial measures for improving the output and efficiency. According to the first Committee's Report in April, 1968 the Unit would not be in position to attain more than 294 days of stream efficiency could be increased to 317 days. The Committee regret to note that none of the plants attached the stream efficiency of 317 days during 1970-71 to 1973-74 and the actual efficiency during this period had been only of the order of 43 to 67 per cent in Ammonia Plant, 34 to 41 per cent in Ammonium Chloride Plant, 47 to 63 per cent in Sulphuric Acid Plant, 50 to 69 per cent in Ammonium Phosphate Plant, 41 to 51 per cent in Ammonium Phosphate Plant, 34 to 75 per cent in Super-phosphate Plant and 26 to 45 per cent in Phosphoric Acid Plant. The Committee were, however, informed by Government in 1970 in reply to their

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\*Not Vetted by Audit

\*\*Please also see further reply to recommendation at—S. No. 22

recommendation in the 44th Report (4th Lok Sabha) that action had been taken to implement all the recommendations of the Sharma Committee. The Committee are surprised that in spite of this the stream efficiency of 317 days has not been achieved. The Chairman-~~man~~ Managing Director informed the Committee during evidence that according to his personal assessment it was impossible to attain the stream efficiency of 315/317 days. What was possible, according to him, was a stream efficiency of 290—300 days. The Committee recommend that Government/FACT should examine the reasons for non-achievement of even the stream efficiency of 317 days which was considered possible by the Sharma Committee and take suitable measures to rectify the position.

The Committee also find that the percentage of actual production to attainable production differs from the percentage of actual stream efficiency to attainable stream efficiency. The Committee are informed that stream efficiency has been worked out with reference to the rated capacity of the plant while the percentage of actual production has been with reference to attainable capacity. The Committee are of the view that in order to judge the performance of the unit, there should be a proper co-relation between the stream efficiency and production. The Committee recommend that FACT should examine this matter and arrange to determine the stream efficiency on a realistic basis in order to judge the performance on that basis.

### **Reply of Government\***

The Committee being constituted by the FACT Board to examine the subject matter of recommendation No. 17 relating to Udyogamandal Expansion and FACT's diversification Schemes will also examine the reasons for the non-achievements of stream efficiency of even 317 days which was considered possible by the Sharma Committee, and determine the stream efficiency on a realistic basis. (Ministry of Petroleum and Chemicals O.M. No. 37012(2)/75/Fert. III dated 29th October, 1975.)

### **Recommendation (Serial No. 6, Paragraphs 3.62 to 3.65)**

The Committee note that the lack of raw materials, maintenance "other reasons" and "unaccounted factors" were mainly responsible for shortfall in production over the designed capacity. On account of maintenance problems shortfall in production was as high as 54.1 per cent in case of sulphuric acid and 46.6 per cent in case of phosphoric acid; in a number of other cases too, the shortfall was considerable on this account. The Committee are distressed to find that 'maintenance problems' in FACT have been responsible for



shortfalls of such high magnitude in production of various items. In the opinion of the Committee it should not be beyond the ingenuity of the management of the FACT to attend to the maintenance problems promptly as and when they arise.

The Committee recommend that there should be a proper schedule of preventive maintenance and repairs and the management should ensure that the maintenance of the plants is done according to the schedule so that there may not be any loss of production on account of inadequate maintenance.

The inability of FACT to achieve 330 days stream efficiency accounts for shortfall in production over the designed capacity both under the heading 'other reasons' and 'unaccounted factors'. The Committee cannot appreciate the rationale of splitting up shortfall in production due to lower stream efficiency under two different heads, namely, "other reasons" and "unaccounted factors". The Committee would like that the confusing terminology of "other reasons" and "accounted factors" may be avoided and the shortfall on account of lower stream efficiency may be indicated under one head so that one can see all the factors inhibiting production in proper perspective.

The Committee have given their separate recommendations in regard to determination of stream efficiency on a realistic basis and evaluation of performance with reference to such stream efficiency.

### **Reply of Government**

The Committee's recommendations contained in paras 3.62 to 3.64 have been noted for actions.

### **Further information called for by the Committee**

Has the schedule of preventive maintenance been laid down?

What steps have been taken to see that the maintenance schedule is observed?

(L.S.S. O. M. No. 16-PU/75 dated 27-12-75).

### **Further reply of Government\***

A Master preventive maintenance schedule covering all plants and indicating the periodicity and nature of inspection for all the major equipments, has been laid down. Every effort is being made by the Company to adhere strictly to this schedule.

(Ministry of Chemicals & Fertilizers O.M. No. M-37012(2)/75-Ferts. II dated 31-1-76)

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\*Not Vetted by Audit

### **Recommendation (Serial No. 7, Paragraph 3.609)**

The Committee note that shortfall in production in Ammonia Consuming Plants on the completion of 3rd stage Expansion was partly due to the lesser production of ammonia. While the requirement of Ammonia for the Ammonia Consuming Plants was 271 tonnes per day, the ammonia plant was capable of producing only 235 tonnes per day. This imbalance was sought to have been removed in the Fourth Stage Expansion by installing additional capacity. The daily production capacity of Ammonia Plant after the Fourth Stage Expansion will be 355 tonnes per day. Although the Fourth Stage Expansion was designed for 330 stream days in a year, the Management explained that conditions inhibiting the production in other units would be equally applicable to the new unit. According a uniform stream efficiency of 317 days have been adopted for all the plants. A distribution pattern was decided upon by the management accordingly to which the production of ammonia would still fall short of requirements by 7385 tonnes per annum. The actual shortage would, however, depend on the extent of utilisation of Ammonia Consuming Plants. The Committee are informed that with the imbalance having been removed in the Fourth Stage, there will not be any limitation in the supply of ammonia to the Ammonia Consuming Plants. It has, however, been stated that while the old Ammonia Plants are capable of operating at the rated capacity on a daily basis, the plant put up in the Third Stage Expansion could be operated only for 130 tonnes a day where the equipments require improvement. The Committee apprehend that unless the production performance of the plant put up under Third Stage Expansion is improved and, wastage of ammonia is controlled the imbalance claimed to have been removed, might reappear. The Committee recommend that FACT should take suitable measures to improve the efficiency of the Ammonia Consuming Plants as well as the Ammonia Producing Plant.

### **Reply of Government**

Committee's recommendation contained in para 3.69 has been noted for action.

Ministry of Petroleum and Chemicals O.M. No. 37012(2)/75-Ferts. III dated 28th October, 1975.

### **Further information called for by the Committee**

What measures have been taken to improve the efficiency of ammonia consuming plants and the ammonia producing plants?

(L.S.S. O.M. No. 16-PU/75 dated 27-12-1975)

### Further reply of Government\*

Major areas, where loss of ammonia has been taking place, have been identified. Remedial measures taken in respect of some of the major items are as under:—

(a) An improved type of chalk filter is being procured for installation in the ammonia sulphate plant to reduce the ammonia loss in the chalk.

(b) With the replacement of the defective filter in the phosphoric acid plant the phosphoric acid concentration will increase after which the ammonia loss taking place in the manufacture of ammonia phosphate is expected to be reduced.

(c) Considerable ammonia loss is taking place in the manufacture of ammonia chloride, due to frequent interruptions in the HCl gas supply from the neighbouring TCC. This is expected to be reduced when the new 100 tpd. caustic soda plant of TCC is commissioned, which would enable the TCC to maintain a steady supply of HCl.

The following measures have been taken in case of ammonia producing plants:

(a) In the composite ammonia plant, the RG boiler, which required frequent maintenance, has been replaced with a new one and this has helped to improve the steam efficiency.

(b) Two of the nitrogen compressors in the ammonia plant have been in operation since 1947 and have outlived their economic life. The limitation on this account will be overcome when a new nitrogen compressor of larger capacity is installed.

(c) Another reason for low utilisation of ammonia capacity has been inadequate refrigeration capacity. Steps are being taken to instal a refrigeration compressor of adequate capacity in the ammonia plant to correct this limitation.

With the improvement in the stability of the power supply, the efficiency of both the ammonia consuming plants and the ammonia producing plants is expected to improve.

(Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75-Ferts. III, dated 31-1-76).

**Recommendation (Serial No. 13, Paragraph 3.118)**

The Committee note that the attainable ratios of consumption of raw materials as fixed by the management were generally higher than the designed ratios. In the case of sulphuric acid required for production of ammonium sulphate and super-phosphate, the attainable ratios were within the designed ratios. The Committee note that the actual ratios of consumption during 1970-71 to 1973-74 were not only higher than the designed ratios but were also higher than the attainable ratios except in a few cases. It was stated that while the plant was designed to operate at certain ratios, these ratios were achievable only under optimum conditions. While deterioration in ammonia could be attributed to power fluctuation which upset the efficiency ratio, the quality of rock and sulphur also affected the ratios for acids. In addition, it was stated that the excess consumption under sulphur was due to the poor performance of the sulphuric acid plants and the excess consumption of rock phosphate and sulphuric acid was attributed to the poor performance of the phosphoric acid, slurry filters and pumps. The excess consumption of ammonia was stated to be due to the low production level in the end plant. Although the Committee on Public Undertakings in their 44th Report of 1969-70 and in their 59th Report on Action Taken thereon recommended that a constant watch over consumption ratios of various raw materials should be kept and whenever any major variations were noticed as compared to designed ratios, prompt steps should be taken to locate the reasons for higher consumption, the Committee find that the value of excess consumption including process losses of intermediate products during the period 1970-71 to 1973-74 increased from Rs. 30 lakhs in 1970-71 to Rs. 85 lakhs in 1973-74. The Committee would like that the reasons for the variations between the actual ratios of consumption and the designed ratios or attainable ratios should be analysed to identify the areas where there had been higher consumption of raw materials so that suitable remedial action could be taken. It is also evident from the discussion relating to findings of special Audit (in paragraph 11.45 of this Report) that the figures of consumption of materials like sulphur and rock phosphate as shown in the Accounts did not have any relevance to the realities of the situation. This had led to substantial unaccounted shortage, which had to be written off subsequently without ascertaining the reasons for shortages. The Committee therefore reiterate their earlier recommendation and would like FACT to maintain constant watch over the consumption ratios of various raw materials and to take prompt remedial measures as soon as major variations are noticed as compared to the designed ratios. The Committee hope that at least now

serious note will be taken of their recommendations in this and earlier reports and concrete steps will be taken by the management to save the FACT of the continuing losses on this account.

### **Reply of Government**

The Committee's recommendation contained in para 3.118 has been noted for action.

#### **Further information called for by the Committee\***

Have the areas of various between the actual ratios of consumption and the designed ratios or attainable ratios been identified? What action has been taken in the matter?

(L.S.S. O.M. No. 16-PU/75 dated 27-12-1975).

### **Further reply of Government**

Areas of variation between actual ratio of consumption and attainable ratios have been identified. The study made in this regard has revealed that higher consumption takes place in the following equipments:

- (i) Shurry filter of the 100 TPD Phosphoric acid plant;
- (ii) Chalk filter of ammonium sulphate plant;
- (iii) Monsanto Acid plants (due to intermitterent runs on account of ageing of the plants);
- (iv) Stoppage of Texaco Gasification unit and 120 TPD Ammonia plant due to power interruptions.

Steps have been initiated by the company to rectify the deficiencies in the above equipments. In regard to the Monsanto plant, the company's proposal is to scrap the plant altogether rather than resort to renovation. It may be mentioned that the excess consumption of raw materials was Rs. 42.07 lakhs only in the first three quarters of the current year 1975-76 as compared to Rs. 88.74 lakhs during 1974-75.

It is expected that regular preventive maintenance, stricter process control and reliable power supply would result in further improvement in consumption ratios.

(Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75  
Ferts. III, dated 31-1-76).

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\*Not Vetted by Audit.

**Recommendation (Serial No. 14, Paragraph 3.125)**

The Committee note that besides excess consumption of raw materials there had been losses due to wastage of hydrogen and ammonia. In the case of hydrogen, the percentage of wastage over the production had increased from 10 per cent in 1970-71 to 14.5 per cent in 1973-74 and the corresponding loss increased from Rs. 18 lakhs in 1970-71 to Rs. 30 lakhs in 1973-74. In the case of ammonia, the percentage of wastage over production increased from 1.5 per cent in 1970-71 to 2.6 per cent in 1972-73 and decreased to 2 per cent in 1973-74 and the corresponding loss increased from Rs. 4.5 lakhs in 1970-71 to Rs. 9.98 lakhs in 1972-73 and Rs. 10 lakhs in 1973-74. The Committee would like Government to examine as to how far the increase in loss in terms of value is justifiable when the wastage has come down from 2.6 per cent in 1972-73 to 2.0 per cent in 1973-74. The Committee are informed that the percentage of wastage of ammonia has come down because of installation of recording instruments and control of the consumption on ammonia. It has also been stated that a two per cent wastage was considered normal in the industry. The Committee would like that FACT should keep continuous watch over the consumption and ensure that the percentage of loss on account of wastage is within the prescribed norms. It was stated that the wastage of hydrogen was due to the quantity vented till the plant is stabilised after each start-up and restrictions due to refrigeration limitations. In 1973-74, the wastage was attributed to the failure of one of the high pressure air compressors and also shut-downs in the oil gasification plant. The Committee would also like that the reasons for the increase in the wastage and consequential loss thereof should be critically gone into so that suitable remedial measures are taken to avoid such wastages.

**Reply of Government**

The recommendation contained in recommendation No. 14 para 3.125 has been noted for action.

(Ministry of Petroleum and Chemicals O.M. No. 37012(2)/75/  
Fert. III, dated 29th October, 1975).

**Further information called for by the Committee**

Have the reasons for the increase in wastage and consequential loss been critically gone into? What remedial measures have been taken?

(L.S.S. O.M. No. 16-PU/75 dated 27-12-75)

### Further reply of Government\*

Reasons for hydrogen wastage have been studied by the Company and it has taken the following remedial measures:—

(1) Whenever the demand for ammonia is low, instead of keeping the two Texaco plant on minimum load, one of the plants is shut down and the other plant is run at a higher load, thereby increasing the efficiency.

(2) Under plant operation improvement programme, a new refrigeration compressor is being ordered, this should eliminate hydrogen venting when ammonia gas drawn by end plans is low.

(3) Reduction in the Shut downs due to break down equipment by systematic preventive maintenance.

Due to better methods of preventive maintenance and stricter process control, there is a reduction in the wastage. The percentage of hydrogen vented during 1974-75 has come down to 8.37 per cent as against 14.5 per cent in 1973-74 and during the current year it has further come down to 6.43 per cent. The refrigeration loss of ammonia during the current year is around the level of 2 per cent.

(Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75-Ferts. III, dated 31-1-76).

### Recommendation (Serial No. 15, Paragraph 3.137)

The Committee regret to note that during the year 1969-70, out of total quantity of 3,24,000 tonnes of steam produced, only 2,17,000 tonnes were accounted for. Even allowing for a 10 per cent wastage in production the Committee find that 23 per cent of the total production valued at Rs. 12 lakhs was not accounted for. This was stated to be due to lack of instrumentation in some of the plants. The Committee note that though the procedure for accounting of steam had been changed from 1971-72, no instruments for recording of consumption of steam were installed till March, 1974. The procedure for allocation of steam to different plant was not uniform from year to year. While up to 1970-71, for every tonne of sulphuric acid produced 1.2 tonnes of steam was assured to have been produced. Out of this, 0.2 tonnes was presumed to have been consumed in the Sulphuric Acid Plant itself and the balance one tonne was treated to have been transferred to other. Consuming Plants from 1971-72 a quantity of 0.8 tonne of

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\*Not Vetted by Audit.

steam was assumed to have been transferred to the Steam consuming Plant for each tonne of sulphuric Acid produced. The Committee are informed that meters have since been provided in several plants for recording accurately steam consumption. The Committee regret to observe that due to the absence of meters, the allocation of steam consumption has not been uniform. The Committee, therefore, recommend that now meters have been installed, figures of the consumption of steam should be on the basis of meter readings and allocation of cost done accurately. The Committee also recommend that FACT should fix standard norms for consumption of steam and judge consumption of steam with reference to prescribed norms.

#### **Reply of Government\***

As the Committee is aware new steam meters have already been installed in the plant; the company has reported that the consumption of steam and allocation of cost is now being done according to meter readings. The company will also now take action to fix standard norms for consumption of steam.

(Ministry of Petroleum and Chemicals O.M. No. 37012(2)|75|Fert.  
III, dated 29th October 1975.)

#### **Further information called for by the Committee**

When will the standard norms for consumption of steam be fixed?

(L.S.S. O.M. No. 16-PU|75 dated 27-12-75)

#### **Further reply of Government\***

Standard norms for consumption of steam in various plants are fixed at the time of commissioning. However these norms require revision due to the subsequent modifications carried out in the plants. A Staff Committee has been constituted to determine norms afresh, taking into account the present condition of the plants. The Committee is expected to submit their report by end of February, 1976.

(Ministry of Chemicals & Fertilizers O.M. No. M.-37012|2|15-Ferts.  
III, dated 31-1-76.)

#### **Recommendation (Serial No. 16, Paragraph 3.152)**

The Committee note that due to frequent power fluctuations the production performance of FACT has been seriously affected and the annual loss on this account was stated to be to the extent

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\*Not Vetted by Audit.



of Rs. 150 lakhs. The Committee also note that the proposal of having a separate captive plant for Udyogmandal Division has not been pursued as it was not found attractive economically. The Committee were informed that a study team consisting of representatives of KSEB, Bangalore Institute and FACT studied the problem as far back as 1968, and as a result of implementation of most of the recommendations of this group there was some improvement and only less than 20 per cent of the dips adversely affected the plant. It was reported that KSEB implemented all the recommendations excepting the one involving foreign exchange as according to them the expenditure on the implementation this was not commensurate with the results. The KSEB also felt that with the Iddikki power station commencing power supply the position would improve considerably. The Committee would like Government to take up the question with the Kerala State Government so that when the Iddikki power station is commissioned. FACT is assured of adequate and steady power supply for its plants in the interest of higher production of the much needed fertilizers.

#### **Reply of Government\***

The Government of India, as recommended by the Committee on Public Undertakings, has taken up with the Government of Kerala the question of ensuring adequate and steady power supply to FACT.

(Ministry of Petroleum and Chemicals O.M. No. 37012/12/75/Ferts.  
III daaed 28th October, 1975.)

#### **Further information called for by the Committee**

What is the outcome of negotiations with the Government of Kerala?

(L.S.S. O.M. No. 16-PU/75 dated 27-12-75)

#### **Further reply of Government\***

As stated in Government's reply to Recommendation No. 16, the Recommendation made by COPU has been brought to the notice of State Government. The State Government have also been requested to advise the State Electricity Board to ensure that the supply of power to FACT unit is adequate and stable. They have also been requested to issue necessary instructions to KSEB to finalise the contract and also ensure adequate steady power supply to Cochin-I.

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\*Not Vetted by Audit.

The report of the action taken by the State Government in regard to the matter is being awaited. The matter is being pursued with the State Government.

(Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75-Ferts. III dated 23-2-76.)

**Recommendation (Serial No. 18, Paragraphs 4.12 to 4.16)**

The Committee note that in order to perfect a process developed by the R&D Division for recovering flourine from phosphate fertilizers in the form of synthetic cryolite, which is a very valuable chemical required for aluminium industry, the FACT after taking the approval of Government in principle, set up a plant at a cost of Rs. 32 lakhs for producing 1650 tonnes of Cryolite per annum.

It was reported that cryolite was being imported and this would be a substitute for the imported cryolite. The Chairman-cum-Managing Director informed the Committee during evidence that the development of this process was discussed with the Government of India and their 'general' approval obtained. It has been admitted by the Chairman-cum-Managing Director that no specific study about the demand for the product in the country was made. It was assumed that generally the market was there. It was also admitted by the Chairman-cum-Managing Director that when the project was taken up, there was no firm and fixed specification available for the product and whatever FACT was hoping to produce would be acceptable to the Industry. The Committee are surprised that such 'general' approval was given by Government without any survey of the demand for the product or an examination of the economics of the project.

The Committee are informed that, on actual production on a bigger scale, the silica content was found to be more than what was acceptable to the industry and therefore FACT made some improvements to reduce that silica content and had given the improved product to an aluminium firm for trial the results of which were awaited. The Committee are also informed that since a fair amount of success was achieved at laboratory scale, FACT did not seek the support of research laboratories. The Secretary of the Ministry admitted during evidence that "what still remains to be done is that the quality of the product should be improved in consultation with aluminium manufacturers". He also admitted that "instead of a bigger plant, it should have been a smaller plant." The Committee

do not appreciate the undue haste with which the FACT went about setting up the plant on such a big scale and started production of cryolite without making a demand survey of the product and without finalising the specification of the product to suit the needs of Aluminium Industry.

The Committee recommend that Government should investigate into the matter and fix responsibility for this unnecessary capital investment and recurring expenditure there on to which the FACT has been put. The Committee recommend that at least now the FACT should in consultation with Public Sector enterprises like the Bharat Aluminium Company settle the specifications for this product and the requirements for Aluminium Industry before going in for large scale production.

The Committee also recommend that research institutes like National Metallurgical Laboratory of the CSIR may also be consulted in order to perfect the process for product improvement.

### **Reply of Government**

As already stated in Government's reply in recommendation No. 19 Government would investigate into the circumstances in which an investment was made on the cryolite plant. The Committee's other recommendations regarding consultation with public sector units to settle the specifications of this product and requirements of the aluminium industry and Research Institutes in order to perfect the process for product improvement have also been noted for action.\*

[Ministry of Petroleum and Chemicals O.M. No. 37012|2|75-Ferts. III dated 28th October, 1975.]

### **Further Information called for by the Committee**

What concrete steps have been taken to settle the specifications of cryolite to suite the requirements of the aluminium industry?

[L.S.S. O.M. No. 16-PU|75 dated 27-12-75]

### **Further reply of Government\*\***

The Company's Research and Development Division had undertaken study for improving the quality of the product. A new tech-

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\*Please also see further reply to recommendation at S. No. 22.

\*\*Not vetted by Audit

nique was developed and samples of the product, obtained after carrying out modifications to the plant, were sent to Bharat Aluminium Company and other leading aluminium manufacturers for analysis and comments. The response from the manufacturers has been favourable and one of them has also asked for a larger quantity of the product for extensive trials.

[Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75-  
Ferts. III dated 31-1-76.]

### Comments of the Committee

Please see paragraphs 1.5 to 1.18 of Chapter I of the Report.

### Recommendation (Serial No. 19, Paragraphs 5.12 and 5.13)

The Committee regret to note that in its anxiety to utilise the surplus carbon-dioxide recoverable from the oil gasification plant at the end of III stage expansion, the FACT set up a dry ice plant in May, 1969 at a cost of Rs. 8.15 lakhs, to produce 6 tonnes per day of dry ice without a proper demand survey and without taking into account the full effect of excise duty on the price structure of the product. It was envisaged that the dry ice would be used by the local fishing industry. The Committee were informed that due to the excise duty leviable on dry ice being high and due to the fact that the use of dry ice in fishing industry called for a new method involving additional expenditure, whereby the dry ice would not come into direct contact with fish, the price of the dry ice did not prove to be economical to the fishing industry. The result of all this has been that the plant could not go into commercial production till now. The Committee are surprised to find that "the Management is not able to locate a copy of the report" submitted by an officer of the Corporation on the basis of which this project was taken up. It has been admitted by the Chairman-cum-Managing Director of the Undertaking that the entire expenditure on the project "is a waste". The Secretary of the Ministry has also admitted that the project has gone wrong because of one vital omission viz., absence of a thorough market study. The Committee would like the entire matter to be thoroughly investigated with a view to fixing specific responsibility for the lapses and taking deterrent action. The Committee would like to be informed of the precise action taken in pursuance of it.

The Committee were informed that the FACT is now exploring the possibilities of Marketing the dry ice in Bombay, which again is running into difficulties due to the transport problems. The Committee would like Government/FACT to come to an early conclusion, as to whether this plant can at all be operated economically and if found otherwise, take an early decision to dispose the plant in the best interest of the Undertaking. The Committee would like to be informed of the action taken in pursuance of this recommendation within three months.

### **Reply of Government\***

Government have decided to constitute a group to enquire into the matter relating to the setting up of a dry ice plant as recommended by the Committee. This group will also investigate into the matters covered in recommendations 4, 18 and 22. The composition of this committee would be communicated to the Committee on Public Undertakings early.

As regards second para of the recommendation, FACT management have stated that efforts made to market and distribute dry ice in Bombay have not been successful. This is because the consumers at Bombay require delivery at very short notice, normally within a few hours. Even if the dry ice is transported by air, the flight timings and the transit time may not always admit of this consumer requirement being met in time. In addition, the material has often to be stored overnight because of the timing of the flights. The losses in transit could also be very heavy.

In view of these problems in marketing dry ice the FACT management is of the view that the plant/equipments should be put to alternative use or disposed of to best advantage. Necessary action is being taken by FACT in this regard.\*

[Ministry of Petroleum & Chemicals O.M. No. M-37012 (2) 175-Ferts. III dated 30-9-1975.]

### **Further information called for by the Committee**

What is the final decision of the Management in regard to disposal of the Dry Ice Plant?

[L.S.S. O.M. No. 16-PU/75 dated 22-10-75.]

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\*Not vetted by Audit

\*Please also see further reply to recommendation at S. No. 22.

### **Further reply of Government**

The company is exploring the possibility of using plant and equipment forming part of the dry ice plant in its other facilities. As soon as the exercise undertaken in this regard is completed, the company would take action for disposal of equipment which cannot be put to other profitable use in the company itself.

[Ministry of Petroleum & Chemicals (Department of Chemicals & Fertilizers) O.M. No. M-37012/2/75-Ferts. III dated 15-11-75.]

### **Comments of the Committee**

Please see paragraphs 1.5 to 1.18 of Chapter I of the Report.

### **Recommendation (Serial No. 20, Paragraphs 6.12 to 6.14)**

The Committee note that the original estimates of the Cochin Phase I for Rs. 39.72 crores which were prepared and submitted to Government in August, 1966 were revised thrice in January, 1968, August, 1971 and February, 1972 for Rs. 45 crores, 57 crores and Rs. 63 crores respectively, the final revised estimates indicating an increase of 60 per cent over the original estimate. The last revision was done on the basis that the plant would go into production by January, 1973. The Committee regret that none of the estimates was approved by Government so far. It is surprising that the FACT instead of getting the approved of revised estimates informed the Government in January, 1973 that it would approach Government for approval of the revised estimates after commissioning of the plant. It is equally surprising that the Ministry also allowed the FACT to proceed with incurring expenditure without the sanction of estimates and awaited the final cost estimates. The Committee are informed that the estimates of Rs. 63 crores worked out in February, 1972 were submitted to Government in December, 1972 but as the date fixed for commissioning had slipped, a review was undertaken by FACT to ascertain estimated additional cost that would be incurred to bring the plants on Commercial production. On the assumption that the commercial production shall start by August, 1974, the estimated cost is now expected to be about Rs. 76 crores. The Committee are informed that instead of examining the revised estimates Government had paid an amount of Rs. 10.5 crores towards equity capital and Rs. 20.45 crores as loan up to 31st March, 1970 for this project.

The Committee note that there has now been an increase of 84 per cent over the original cost estimates which have been attributed by the company to various reasons. The increase over the original estimates was stated to be on account of revision of the process scheme originally adopted, change from Japanese quotation for supplies to Italian supplies besides increase in cost of equipment, land and township and delay in commissioning. The Committee are distressed to note that Government in spite of increase on several accounts did not go into economics of the revision but only stated that they took into consideration the revised estimates for their budget proposals. They are surprised that even at this stage there is no finality of the cost of project as still a date for commercial production has to be decided although the Revised Estimate was based on the assumption that commercial production would start by August, 1974. The Committee feel that the entire procedure displays laxity of financial control both on the part of FACT and the Ministry with the result that the expenditure on the project has increased considerably. The Committee need hardly stress that the revised estimates should not be assumed to be a mere completion report of the project but it is an instrument of financial control. The Committee recommend that Government should without further delay, examine critically the reasons for the abnormal increases in the cost estimates and the economics of the project before approving the revised estimates. In this connection, the Committee would like to invite attention of Government to their recommendation in paragraph 2.20 of their 39th Report (5th Lok Sabha) on Pyrites, Phosphates and Chemicals Ltd. requiring that wherever there is a material deviation from the original estimates, the matter should be brought to the notice of Parliament. The Committee expect that Ministry should before long bring to the notice of the Parliament the detailed reasons for the increase in estimates, their effect on the cost of production and the economics of the project.

The Committee also note that there are no hard and fast criteria to determine when a fertilizer plant should be deemed to go into commercial production and the question is decided by the Board. In the case of Trombay Plant, the date when the plant reached the rated capacity and proved the guarantees, was the date of commercial production; but in the case of Gorakhpur plant, six to eight months were allowed after the commencement of production to enable the suppliers to make good some defects and prove guarantees and then the plant was put into commercial production. In the opinion of the Committee such information should have been available in the DPR. The Committee feel that the date of putting a plant on commercial production is a very significant date and uniform set of criteria should be followed by all the undertakings in

fixing this date which should not be left entirely to the discretion of the Board of Management. They recommend ~~that~~ Government may lay down guidelines, if necessary, sector-wise for the benefit of the Boards to help the determine the dates for putting their plants on commercial production on a uniform basis.

### **Reply of Government**

Government have noted the recommendation of the Committee contained in para 6.13. As regards the recommendation contained in para 6.14, the BPE have already vide their circular No. BPE/1(138)/Adv.Fin./70, 4th January, 1971 issued guidelines for fixing a date of commercial production and treatment of expenses incurred during trial runs and, guarantee period performance tests. A copy of the guidelines is enclosed. [See Appendix II].

[Ministry of Petroleum and Chemicals O.M. No. 37012(2)/75/  
Fert. III, dated 29th October, 1975].

### **Further information called for by the Committee**

Have Government examined the revised cost estimates? Are they satisfied with the reasons for abnormal increase? What is the effect of increase on the economics?

[L.S.S. O.M. No. 16-PU/75, dated 27-12-75]

### **Further reply of Government\***

The company are expected to finalise the revised cost estimates shortly. Government, while examining the revised costs, would go into the reasons for the increases and the effect of such increases on the overall economics of the project.

[Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75-  
Ferts.III, dated 31-1-76]

### **Recommendation (Serial No. 21, paragraph 6.32)**

The committee note that the original project report based on Japanese plant and equipment estimated a period of 27 months between the anticipated date of signing the contract and the date of commissioning (June, 1969). At the time the contemplation was to finance the project out of free foreign exchange. Later, Government of India decided that due to non-availability of free foreign exchange, negotiations should be made with France, Italy

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\*Not vetted by Audit



and other countries. Consequent on the availability of Italian credit, the last contract was signed in February, 1968 and the period was reduced to 20 months and the plant was scheduled for commissioning in October, 1969. The Committee regret that because of the delay in the supply of plant and equipment by the foreign as well as indigenous suppliers and because of certain defects in the synthetic and the reform gas plants, which had to be rectified, the Ammonia and Urea Plants could be commissioned only in April, 1973. The Committee note that the collaborators had pointed out in October, 1968 that the plant using centrifugal compressors could achieve greater efficiency and produce cheaper ammonia, but cautioned that since such a plant was more complex, the commissioning and, operational difficulties would be of much higher order. The Secretary of the Ministry had admitted during evidence that "This new technology was just coming into operation in other parts of the world. So we started on this and we have to pay a heavy price for this. We put up the plant according to certain higher parameters as against the lower parameters with which we had been familiar. The only mistake we made was that we selected certain parameters with which no one was familiar", which eventually led to all the troubles in the plant and delayed the commissioning. The committee are surprised that the FACT should have accepted the Plant without verifying whether a plant of this dimension had been in actual operation elsewhere and more so when no one in India was familiar with parameters of the technology of this Plant. While the Committee are not averse to the use of forward technology in setting up of the projects, they would like that Government should satisfy themselves fully that such a technology has been successfully put up in operation elsewhere so that no experiment is done at the cost of the country.

The Committee are informed that among the indigenous suppliers, the main bottleneck was the delay in the supply and erection of boilers and pressure vessels by M/s. A. Vickers and Babcock Ltd., Durgapur. Though the boilers were scheduled to be supplied erected and commissioned by July 1969, the erection work was got done by FACT at the cost of the suppliers through another contractor and the boilers commissioned only in October, 1971. The FACT's claim for liquidated damages was also not accepted by M/s. A. Vickers and Babcock Ltd. and the legal opinion was also not in favour of pressing the claim. The Committee understand that the penalty leviable on M/s. A. Vickers and Babcock Ltd., for delay in supply worked out to Rs. 6.5 lakhs against which an amount of Rs. 7.4 lakhs had been withheld from the bills and the question of levy of penalty is still under consideration of Company. The Committee would like to be informed of the results.

The Committee regret to note that on account of the delay in commissioning of the plant, there had been a loss of production to the extent of 1.65 lakh tonnes of Urea in the first year of operation, 2.31 lakh tonnes in the second year of operation and 2.64 lakh tonnes in the third year of operation on the basis that the plant would be working on 50 per cent capacity in the first year of operation and 70 per cent capacity in the second year of operation and 80 per cent capacity in the third year of operation. It has been admitted during evidence that the loss in production was to the extent of Rs. 10 crores in 1973-74. It has been stated that the project is presently operating on a capacity of 50 to 60 per cent on an average and the measures to step up production are on way. The Committee are informed that even now the biggest bottleneck is on the waste heat recovery system and after a review of the design of the plant has been undertaken the defects had been identified and the plant is now capable of going upto a load of 80 per cent without modification. The main constraints in achieving 100 per cent rated capacity are however stated to be insufficient superhead temperature of steam to the turbine and insufficient cooling in the ammonia synthesis loop. While in the case of the former item, responsibility has been fixed on the suppliers and they have agreed to supply all equipments necessary for rectifying the defects free of cost, in the latter case the matter has been taken up with the Fertiliser Corporation of India, who are the process guarantors and with their collaborators. The Committee need hardly stress that FACT has already lost a valuable time in commissioning the plant and achieving the rated capacity. The Committee recommend that the FACT should lose no further time in rectifying the defects noticed in the plant and achieving the rated capacity.

#### **Reply of Government**

Government accept the Committee's recommendation and would take adequate safe-guards to ensure that any new technology imported into the country is a proven one and that there is no risk of experimentation at the country's expense.

The claims of FACT against M/s. A. Vickers and Babcock Ltd., for delay in the supply of boilers have been settled taking into consideration the counterclaims of M/s. AVB and the legal opinion obtained by the company. As part of the settlement, the penalty was restricted to Rs. 63,013 and recovered from the bills which were withheld as indicated in the Ministry's reply dated March 1972 referred to in para 6.24 of the report. The matter has thus been settled finally.\*

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\*At the time of factual verification Audit intimated that as part of overall settlement, the FACT has agreed to pay Rs. 40,000/- as testing fee as claimed by M/s. A. V.B.

As the Committee is aware, production in the Cochin unit of FACT has not so far stabilised at near rated capacity due to mainly to defects in some of the equipments and design deficiencies. Although the plant is presently operating around 60 to 65 per cent of capacity, the company on the basis of a detailed survey has drawn up a time bound programme for carrying out modifications in the plant with a view to achieve and stabilise production at near rated capacity. The implementation of this programme is likely to take 18 to 24 months. Adequate provision has been made for financing these modifications.

[Ministry of Petroleum and Chemicals O.M. No. 37012(2)/75/  
Ferts. III, dated 15th November, 1975]

**Recommendation (Serial No. 22, Paragraphs 6.44 & 6.45)**

The Committee note that the FACT constructed one hostel and another building (Ambalamedu House) for accommodating foreign technicians and engineers, who were to come under agreements with foreign suppliers at a cost of Rs. 4.62 lakhs and Rs. 14.2 lakhs respectively and these were furnished at a cost of Rs. 1.11 lakhs and Rs. 1.4 lakhs respectively. The Committee regret to note that the maximum number of foreign engineers accommodated in the Ambalamedu House was only 20 and the occupancy ratio was decreasing from 35 per cent in 1971 to as now as 5 per cent in 1974 (upto August, 1974). The Committee are informed that according to the contractual obligation FACT had to provide for senior engineers first class hotel accommodation of international standards or equivalent and if the stay extended beyond six months of the original expected period, they had to be provided family accommodation. The FACT had to incur an expenditure Rs. 30,763 on hire charges of buildings taken on rent for the period October, 1968 to November, 1972. In the opinion of the Committee accommodation provided in the Ambalamedu House was excessive in view of the low level of occupancy, the FACT could have restricted the scale and type of accommodation to the actual number of foreign technicians and engineers expected to come under the agreement. The Committee recommend that Government should investigate the reasons for creating such large accommodation in excess of the requirements at a cost of over Rs. 15 lakhs and fix responsibility for the lapses. The Committee would like to be informed of the action taken.

The Committee are informed that the FACT are exploring that possibility of accommodating the foreign technicians under Cochin Phase II and also for utilising it as a hotel to meet the tourist requirements. The FACT is also stated to be entering into some

arrangement with the Department of Tourism. The Kerala State Tourism Department Corporation is also stated to have evinced some interest. Since it is reported that no engineer connected with Cochin Phase II is staying in Ambalamedu House at present, the Committee recommend that FACT should intensify its efforts with the Department of Tourism/Kerala State Tourism Development Corporation and take suitable measures so that the Ambalamedu House could be put to more profitable use.

### **Reply of Government**

As recommended by the Committee in para 6.44 the Government would investigate into the construction of the Ambalamedu House. The company is actively exploring the possibility of putting the Ambalamedu House to profitable use.

### **Further Reply of Government in respect of Recommendations at S. Nos. 4, 18, 19 and 22\***

In the reply to the recommendation No. 19, it was stated that the Government would be setting up a group to enquire into the matter relating to the setting up of a dry ice plant as recommended by the Committee and that group would also investigate into the matters covered in recommendation Nos. 4, 18 and 22. Government have further examined the matter and it is proposed to have the matters covered by recommendations at S. No. 4, 18, 19 & 22 investigated internally in the Ministry. Thereafter, such further action as is necessary will be taken.

[Ministry of Petroleum & Chemicals (Deptt. of Chemicals & Fertilizers) O.M. No. M-37012/2/75-Ferts.III, dated 3-12-75]

### **Further information called for by the Committee**

Please give details of proposals being pursued and the outcome.

[L.S.S. O.M. No. 16-PU/75, dated 27-12-75]

### **Final reply of Government\***

The company's efforts to enter into arrangements with the India Tourism Development Corporation and Kerala Tourism Development Corporation for utilising the Ambalamedu House as a tourist resort have not yielded any result. The company had also explored the possibility of the Naval authorities at Cochin utilising the Ambalamedu House. As these efforts did not also prove fruitful, the company is at present exploring the possibility of renting out

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\*Not vetted by Audit

the building for use as a hotel or in the alternative converting it into a training centre or residential accommodation for their officers.

[Ministry of Chemicals & Fertilizers O.M. No. M-37012/2/75-Ferts.III, dated 31-1-76]

### **Comments of the Committee**

Please see paragraph 1.19 to 1.22 of Chapter I of the Report.

### **Recommendation (Serial No. 23, Paragraph 6.55 and 6.56)**

The Committee note that Government approved the project report of Cochin Phase-II excluding Ammonium sulphate and Bag making plant at a cost of Rs. 35 crores in 1970. The cost was re-assessed in October, 1972 and the project cost revised to Rs. 45 crores. It was stated that the revised estimates were prepared after getting more reliable data from the collaborators. The Committee regret to note that though the revised project cost estimates were submitted to Government in February, 1973 they have not so far been approved on the ground that the estimates would have further to be revised in view of the recent escalation in equipment and construction costs. The Committee have already recommended in paragraph 6.13 that cost estimates should be prepared after taking into account all the foreseeable items of expenditure and the outlay should be indicated as accurately as possible. The Committee see no reason why the revised estimates should not have been considered making provision for escalation in cost of equipment and construction as far as could be reasonably known instead of delaying the sanction and thus defeating the purpose of sanction of an estimate. The Committee recommend that Government should critically examine the reasons for excesses and also their effect on the economics of the project before sanctioning the revised estimates and bring the detailed reasons for the increase in estimates and their effect on cost of production and the economics of the project before Parliament.

The Committee note that Cochin Phase-II was originally expected to be commissioned in September, 1974 but due to certain reasons it is not likely to be commissioned before 1975. The Committee also find that the plan are expected to reach a production level of 1,62,000 tonnes by 1975-76, 3,41,000 tonnes by 1976-77, 4,22,000 tonnes in 1977-78 and 4,85,000 tonnes in 1978-79. The Committee would like that the Government/FACT should ensure that the capacity utilisation as planned is adhered to. The Committee also recommend that in view of the delay in commissioning of the

plant, the Government|FACT should take immediate steps to get the period of guarantee extended suitably. The Committee feel that unless steps are taken right from now to deal with the factors contributing to delay in the execution of the project, the story of Cochin Phase-I might be repeated in this case also leading to escalation of cost estimates and heavy loss in production. The Committee, therefore, recommend that Government|FACT should monitor the progress of this project concurrently and ensure that the revised schedules of completion by July, 1975 are adhered to.

#### **Reply of Government**

Government is already closely monitoring the progress of implementation of Cochin II. Every possible step will be taken in conjunction with the company to ensure that the project is completed at the earliest. As recommended by the Committee, the company is also exploring the possibility of getting the relevant guarantees suitably extended.

[Ministry of Petroleum and Chemicals O.M. No. 37012(2)|75|  
Ferts.III, dated 15-11-75]

#### **Recommendation (S. No. 26, Paragraph No. 8.10)**

The Committee are shocked to find that for over 4 years the FACT had been selling the ammonium sulphate at prices higher than the ceiling fixed under the Fertilizer Control Order. The Committee recommend that Government should learn a lesson from this experience and evolve a suitable machinery to ascertain the prices fixed by the different indigenous producers so as to have a check that producers do not charge in excess of the prices fixed by the Ministry of Agriculture under the Fertilizer Control Order.

#### **Reply of Government\***

Ministry of Agriculture is already getting Quarterly reports from the State Governments showing the prices at which fertilizers are being sold to farmers. A copy of the proforma prescribed for the Quarterly report is at Appendix III. At present, the information in respect of sale by manufacturers is not being obtained from the manufacturers themselves regularly and is obtained as and when need for it arises. Under the Fertilizer Control Order, 1957, the responsibility for checking black-marketing in fertilizers and for launching prosecutions etc. lies with the State Governments, who have been given wide powers to deal with the offenders. The Fertilizer Control Order has been declared as a Special Order

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\*Not vetted by Audit

to enable a summary trials of violaters of the provisions of the Fertilizer Control Order. Nevertheless in order to keep a bigger check that manufacturers do not charge prices in excess of those statutory fixed under the Fertilizer Control Order and in pursuance of the observations made by the Committee on Public Undertakings, the Government have decided to prescribe a fortnightly return of prices at which fertilizers are being sold by the domestic manufacturers. This information will be monitored and due check kept for any violation of the statutory control on prices of urea, ammonium sulphate and calcium ammonium nitrate or any other fertilizer the maximum selling prices of which comes to be statutorily controlled. Any such basis will be immediately brought to the notice of the State Government for suitable action in accordance with the law.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/  
3/75-Fertilizer III dated 6-12-75.]

#### **Recommendation (Serial No. 27, Paragraph 8.25 and 8.26)**

The Committee regret to note that the FACT has not been able to fully recover the expenditure incurred by it on the marketing organisation from the margin provided therefor in the selling prices, and all over the years it has been spending more than the margin. The net excess expenditure rose steeply from Rs. 38 lakhs in 1970-71 to Rs. 149 lakhs in 1971-72 and then came down sharply to Rs. 16 lakhs in 1972-73. Even on an earlier occasion, the Committee on Public Undertakings (1968-69) in their 44th Report (4th Lok Sabha) had recommended that "there was a need for critical study of the marketing organisation and the expenditure incurred on it". Government in their reply in November, 1969 stated that the Committee of Directors felt the expenditure actually incurred by FACT in their market operations cannot be considered excessive and the percentage of marketing expenditure had come down from 12.37 in 1967-68 to 9.3 in 1968-69 and with increased production in 1969-70 it was expected to be 8.7. The Committee, however, find that the actual percentage during 1968-69 was 10.59. The Committee fail to understand as to how it was then intimated by Government that the percentage was only 9.3 while the actual was different. It is surprising that the FACT has not been able to locate the basis on which the figure was worked out.

The Committee regret to note that in spite of their earlier recommendation in the 44th Report (4th Lok Sabha) the percentage of marketing expenditure to sale value, instead of coming down, has gone up from 11.65 in 1970-71, 13.88 in 1971-72 and 11.89 in

1972-73 and this is because, as admitted by the Chairman-cum-Managing Director, "the organisation has been built up for a larger sale. It is also unfortunate that the market expansion was taken up rather prematurely." The Committee see no justification for such a premature expansion when the production was far behind the target and the demand for fertiliser was in excess of supply. The Committee find that in the case of fertiliser Corporation of India Ltd., the cost of marketing as a percentage of turn over is 3 per cent, exclusive of distributor's margin and freight. If these were also to be included the cost of distribution may work out to about 15 per cent of the turn-over value. The Committee are informed that the FACT has introduced a system of sales budget and marketing expenditure budget, broken down to level of regions and the marketing efforts made by various field officers was watched on the basis of these budgets. It was also stated that with the commissioning of Cochin Phase I, the incidence of fixed marketing expenditure was expected to come down. The Committee feel that unless there is an increased turn-over due to higher production, the expenses on marketing will prove to be burdensome to the FACT. The Committee, therefore, recommend that Government/FACT should immediately undertake a critical analysis of the market expenses with a view to identifying the areas where economies could be effected so that expenses on marketing are kept to the minimum and in any case within the margin provided for in the selling price. The Committee also recommend that it should be the endeavour of the marketing organisation of the FACT to continuously review their system of distribution with a view to seeing that farmers, particularly marginal and small farmers got fertilizers and the agricultural inputs at the right time and in adequate quantities at fair prices.

#### **Reply of Government\***

Government accept the recommendation of the Committee contained in para No. 8.26 and are advising FACT to constitute a high level committee to undertake immediately a critical analysis of the market expenses with a view to identifying areas where economies could be effected.

The Company has also been advised to review the system of distribution with a view to seeing that farmers, particularly marginal and small farmers, obtain fertilizers at the right time and in adequate quantities at fair prices.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/2/75-Ferts. III dated 21-11-75].

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\*Not vetted by Audit.



**Recommendation (Serial No. 28, Paragraph 8.33 to 8.36)**

The Committee note that the targets for the preparation of mixtures in the different mixing centres were not achieved during 1970-71 to 1972-73, except in a few cases. Not only have the targets been not achieved, but the actual quantities of mixtures prepared at different centres also show a declining trend which has been attributed to lack of demand. Consequently, four centres had to be closed down during the last three years. The Committee are informed that the targets are based on projected demand for the mixtures in the area and actual production was limited to the ready effective demand for mixtures registered by the dealers of the area from time to time. The Committee do not see any justification for keeping a target which is not related to the actual demand for the mixtures and why the FACT should not have ascertained the demands first from the dealers and then fixed the targets.

While the Committee see no justification for keeping a target unrelated to the demand, they would like FACT to examine critically the reasons for the declining trend in the demand and whether it was due to the ineffectiveness or any imbalance in the mixtures. The Committee recommend that the assistance of agricultural research institutes may be obtained in order to assess the suitability of the mixtures with reference to soil conditions particularly, when the modern trend in agriculture is more towards the use of mixed fertilisers.

The Committee are surprised to note that a declining trend having set in the preparation of mixtures, the FACT has not taken any steps to evaluate the performance of each Centre in order to work out the profit or loss incurred by each Centre separately. In the absence of the working results, the Committee are not able to appreciate the manner in which the financial viability of each Unit is being assessed at present.

The Committee recommend that the operations of the Mixing Centres should be kept under continuous review and the number of mixing centres should be regulated with reference to the demand for the type of fertilisers and the financial viability of operations of each Centre.

**Reply of Government\***

The Company has examined the reasons for the declining trend in the demand for mixtures and it is their assessment that the de-

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\*Not vetted in Audit

cline is not due to the ineffectiveness or any imbalance in the mixture. The Company is further of the view that this fall in demand is mainly due to increased availability of NP and NPK complex fertilisers of various grades. As recommended by the Committee, the Company is obtaining the assistance of Agricultural Universities and Research Institutions, etc., for assessing the suitability of various types of mixtures manufactured for various crops and soil conditions.

The recommendation of the Committee in para 8.36 is accepted.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/2/75/Fert. II] dated 15-11-1975].

**Recommendation (Serial No. 30, Paragraphs 9.17 to 9.19)**

The Committee note that as against the sanctioned strength of 3199 fixed by the Managing Director in April, 1965 and the strength of 3380 finalised on the basis of works study and discussion with unions in October, 1968, the actual strength was as 3385 on 31st March, 1970\*. This increased to 3699 on 31st March, 1973 but came down to 3552 on 31st March, 1974. The increase was quite marked in the semi-skilled and unskilled category where the strength on 31st March, 1973 was 1497 as against 1178 fixed as a result of works study. The Committee of Directors which examined the staff position in August, 1969 justified the excess on the ground of difficulty in retrenching the surplus staff due to change in the process. The Committee are surprised to find that FACT was carrying a surplus even from 1965 when the surplus was 567 and after IInd Stage expansion it was 486 and IIIrd stage 330 and after IVth stage—398. The additional expenditure due to the surplus staff was reported to be of the order of Rs. 72 lakhs per year and the increase in the cost of production was about 2 per cent. The Committee are informed that though the Government were aware of the surplus staff and the need to find a solution, there were difficulties in reduction in strength on account of the opposition from the unions. The Committee are not able to appreciate the logic in this argument and they do not see any justification for recruitment of staff in excess when they found that even as early as 1965 the surplus was huge as 567. They feel that the situation should have been tackled even at that stage and staff recruitment should have been only with reference to the actual requirements. The Committee are surprised that the Project Report

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\*At the time of factual verification FACT intimated that the sanctioned strength of Udyogmandal division is 3709.

of the IIIrd stage Expansion did not indicate the staff strength, although it has been admitted by the Ministry that it was the normal procedure to show the strength in the project report. The Committee fail to understand as to why this omission was not noticed and rectified before the approval to the IIIrd stage expansion was given. The Committee are informed that in September, 1973 a settlement was arrived at for increasing the productivity according to which the personnel strength in all the departments would be fixed by the Management on the basis of works study conducted by Industrial Engineering Department. It was stated that the attempts are being made to adjust the staff to the maximum extent by deployment in Cochin Phase II. But according to the Management there would still be certain people who obviously would not be fitted in. Management would be considering this matter and resolving the problem.

The Committee have been pointing out in several of the reports that one of the maladies in public undertakings is recruitment of staff in the initial stages in excess of requirements thus creating problems at the stage of operation. The Committee expect that at least now Government Undertaking should learn a lesson and ensure that there is no recruitment of the staff at any level unless the surpluses are absorbed and proper norms are fixed for the Cochin Phase II and the future projects. The Committee need hardly stress that the indications given in the DPR about the staff strength should always be taken as the maximum and the FACT should ensure that these limits are not exceeded at any time without a full and detailed assessment by the Board.

The Committee find that on the one hand, the FACT is carrying a large surplus involving an additional expenditure of 72 lakhs per year, on the other hand, the overtime bill of the Corporation has been amounting from Rs. 8.7 lakhs in 1967-68 to Rs. 36 lakhs in 1973-74. The Committee are informed that surplus are in certain departments like Marine, Transportation, Garage, Security etc. and could not be utilised by the production or maintenance Departments where the incidence of overtime is high. The Committee recommend that Government/Corporation should critically go into the reasons for abnormal increase in overtime and fix suitable productivity norms so that the expenses on overtime are obviated. The Committee also suggest that special care should be taken to see that non-technical and supporting staff should be multifunctional capable of handling a variety of jobs and this will enable the problems of the types now felt by FACT being easily tackled. The

Committee also recommend that there should be a system of inbuilt incentives in wages with a view to increasing the productivity.

### **Reply of Government\***

The recommendation of the Committee that the staff strength given in the DPR should not be exceeded at any time without a full and detailed assessment by the Board, is accepted. The norms in regard to the staff requirements of Cochin-Phase II are being fixed and the company, will to the extent possible be re-deploying the surplus personnel from Udyogmandal and the Head Office. Recruitment from outside will be resorted to only in cases where suitable hands are not available from amongst surplus staff. FACT have also taken action to control expenditure on overtime by fixing up maximum hours for every department for overtime work, depending on the nature of work in each department.

The recommendation of the Committee that the non-technical and supporting staff should be multi-functional, capable of handling a variety of jobs and that there should be a system of inbuilt incentives in wages for increasing productivity, has been brought to the notice of the company for implementation suitably.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/2/75/Ferts. III dated 15-11-1975].

### **Recommendation (Serial No. 32, Paragraphs 10.35 to 10.40)**

The Committee note that FACT is following the system of standard costs which were fixed in 1966 on the basis of designed capacities of the plants and the ratios of the consumption of raw materials as also stream efficiency of 330 days in a year. The Committee note that the standard costs were revised only in March, 1971 after taking into account the attainable stream efficiency of 317 days although the attainable stream efficiency was indicated by the Sharma Committee as early as April, 1968. The result was the standard cost during the intervening period between 1968 to 1971 did not serve as the correct basis for judging the efficiency of operations.

It was clarified that the revision of standard costs was made not only with reference to stream efficiency indicated by the Sharma Committee but also after standardising the norms of consumption ratios.

The Committee note that the actual cost of production of different products except Superphosphate and Sulphuric Acid were higher than the revised standard costs and the actual costs ranged

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\*Not vetted by Audit.

from 121 per cent to 167 per cent of the revised standard costs during 1971-72 to 1973-74.

An analysis of the variations in costs during the period 1971-72 to 1973-74 indicates that there had been huge variations between the actual fixed and variable cost over the revised standard costs while the increase in the variable costs were attributed to increase in price of raw materials packing materials and increase in the cost of intermediate products, the increase in the fixed cost were mainly due to lower volume of production. The Committee find that though the increase in variable cost has been mostly attributed to increase in the cost of raw materials, there have been variances due to usage also thus indicating excessive consumption.

The Committee are informed that every month a variance report is prepared on the basis of information received from production Departments and circulated to Plants for action. The Committee recommend that the Management should introduce a system of analysis of the variance reports with a view to identifying the causes for such variances and taking suitable remedial measures in time.

The Committee find that in spite of the recommendation in paragraph 3.33 of their 44th Report (4th Lok Sabha) that it would be useful for a Public Undertaking to have comparative figures from other undertakings in the same industry on various aspects of their working so far no system has been introduced to have a regular exchange of information. The Committee recommend that the Bureau of Public Enterprises should devise ways and means of introducing such a system for the benefit of the Public Undertakings.

### **Reply of Government\***

The recommendation in para 10.39 of the Report is accepted. The FACT is already taking action to analyse for the variances, along with the remedial measures needed.

As regards para 10.40, B.P.E. have already taken up a project on inter firm comparison between fertilizer industries in the public sector. This project also includes certain units in the private sector.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/  
2/75/Ferts. III dated 15-11-1975].

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\*Not vetted by Audit.

### Comments of the Committee

Please see paragraphs 1.31 to 1.39 of Chapter I of the Report.

#### Recommendation (Serial No. 33, Paragraphs 10.49 to 10.51)

The Committee regret to note that though the Board of Directors approved the strengthening of internal audit section as early as January, 1969, the reorganisation of the Internal Audit and the post of Chief Internal Auditor were approved only in March, 1973, after over 4 years. The Chief Internal Auditor was appointed about one year thereafter. The proposals regarding staff strength and Internal Audit manual prepared in March, 1974 are still awaiting approval. The Committee also note that the Company auditors have in their Report for accounts for 1972-73 remarked that:—

“There is no proper Internal Audit Department in the Company.....we are of the view that there should be a proper Internal Audit Department which should function independently and report directly to the top Management.”

The Committee are informed that the reorganisation proposals were made after a study of the arrangements existing in other public sector undertakings. The Board decided that in addition to Financial and Proprietary audit, a comprehensive audit programme including management audit should be introduced. It is stated that the draft internal audit manual is expected to be approved and staff would be in position by end of March, 1975. The Committee are not happy at the inordinate delay in strengthening up the internal audit wing and finalising the Internal Audit Manual. The Committee recommend that the company should lose no time in strengthening the Internal Audit Wing to evaluate a comprehensive audit including management audit being conducted in time and the results reported to management so that they can serve as an effective tool of management. The Committee need hardly stress that the reports of internal audit should receive serious consideration at all levels.

### Reply of Government

The Committee's recommendation is accepted and action has already been taken to streamline the procedures for conducting comprehensive Internal Audit and timely issue of Internal Audit Reports to the management. A procedure has also been introduced to

ensure that action taken by the various units at Division level is watched at Division Head Level and reported to Management.

Action has also been taken to reorganise Internal Audit keeping in mind the overall staff requirements of FACT including Cochin Phase II and also the need for exercising the utmost economy.

Ministry of Petroleum and Chemicals O.M. No. M-37021/  
2/75/Ferts. III dated 15-11-1975].

### **Recommendation (Serial No. 34, Paragraph 10.53)**

The Committee note that the volume of book-debts had come down from Rs. 581 lakhs on 31-3-1971 to Rs. 300 lakhs on 31-3-1973 and in terms of turn-over from 18 per cent to 15 per cent. The Committee, however, find that the total amount on 31-3-1973 includes Rs. 217 lakhs outstanding for over six months and out of this Rs. 50.28 lakhs is considered as doubtful debts (25 per cent of the total debts). In the opinion of the Committee this provision of nearly 25 per cent is on the high side FACT should take concerted measures to realise the amounts post-haste.

### **Reply of Government**

Recommendation of the Committee is accepted.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/  
2/75/Ferts. III dated 15-11-1975].

### **Recommendation (Serial No. 37, Paragraphs 12.13 to 12.15)**

The Committee regret to note that as against the contractual amount of Rs. 15.96 lakhs for the work of fabrication and erection of tanks and vessels undertaken by FEW on behalf of M/s. T. T. Products Ltd., FEW completed the work at a cost of Rs. 19.13 lakhs resulting in a loss of Rs. 3.17 lakhs. The Committee are informed that the loss was due to the delayed completion of the work which entailed increase in cost of labour material which in turn was due to delay in putting up the structures by another sub-contractor of the T.T.C. The Committee regret that in the absence of an escalation or any other suitable clause in the contract (to protect the interest of FEW against such delays) and to enable recovery of such increase in costs from the customer the FEW could not recover the excess over contract amount from the party. Moreover, the sub-contractor because of whom the main work got delayed was not

under FEW but under the party for whom the work was undertaken.

Yet another case where the FEW had to incur a loss of about one lakh, was in the contract with M/s. T. T. Products for fabrication and supply of converter. In this case while the contracted amount was only Rs. 86,381 the actual cost was Rs. 1,88,837.

The Committee feel that FEW should on the basis of experience in these works, learn a lesson and private suitable safety clauses in the agreements with parties to protect the interests of FEW against such losses.

### **Reply of Government**

The recommendation of the Committee contained in para 12.13—12.15 has been noted.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/2/75/Ferts. III dated 15-11-1975].

### **Further information called for by the Committee**

Please state the action taken in the matter.

(L.S.S. O.M. No. 16-PU/75 dated 27-12-75)

### **Further reply of Government\***

The company has taken action to include appropriate escalation/penalty clauses in their quotations to safeguard FEW's interest. In some cases, the customers have not accepted these clauses and have insisted on their withdrawals as a pre-condition for considering their offers and in such cases these conditions have had to be relaxed in the best commercial interests of FEW.

[Ministry of Petroleum and Chemicals O. M. No. M-37012/2/75-Ferts. III dated 31-1-76].

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\*Not vetted by Audit.



## CHAPTER III

### RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF GOVERNMENT'S REPLY

#### **Recommendation (Serial No. 1, Paragraph 2.21)**

The Committee note that there is gross under-utilisation of capacities of different fertilizer plants in the country. Against the installed capacity of 19 lakh tonnes in all the plants put together, the actual production has been only a little over 50 per cent i.e. 10.9 lakh tonnes. Some of the constraints in achieving a higher rate of production are stated to be non-availability of adequate power, sufficient quantity of coke-oven gas and proper grade of gypsum and obsolete technology or as in the case of Cochin and Durgapur the Indian engineers had selected larger parameters with which they were not familiar. The Committee would like that each of these causes for the under-utilisation of capacities should be critically analysed with a view to correcting them at the earlier in the interest of achieving the maximum production. The Committee are surprised to find that even in respect of the projects in the Fifth Five Year Plan although action has been initiated in setting up projects, priority in taking up plants, nature of product-mix and tying up with finances are still to be finalised. The Committee expect that a decision on these aspects will be taken without any further delay and the experiences gained so far in the construction and maintenance of the plants already set up will be utilised to ensure that the new projects come up in time and the targets set for them are adhered to. The Committee need hardly stress that, in view of the world wide shortage of fertilizers and the phenomenal increases in the import price of fertilizers, import of fertilizers, would become more and more difficult in the coming years.

#### **Reply of Government\***

Government has been constantly endeavouring to maximise capacity utilisation and thereby augment indigenous production. Towards this objective, fertilizer production is closely monitored. This is done on a weekly basis to facilitate timely action being taken to reduce plant outage and maximise production. It is submit-

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\*Not vetted by Audit.

ted that the capacity utilisation of fertilizer plants needs to be viewed with reference to the spread of investment over a period of time.

The performance of fertilizer plants would broadly fall into three distinct categories:—

1. Extremely old plants with ageing equipment and feed-stock and technological constraints. This category would include plants such as those at Sindri, Udyogamandal, Rourkela, Neyveli, Varanasi and Ennore.
2. Plants which are modern and stabilised such as the ones at Nangal, Gorakhpur, Trombay, Namrup, MFL, Baroda Goa and Kota.
3. New plants, which have recently been commissioned and are yet to be stabilise production.

2. The capacity utilisation of the various fertilizer plants as divided in the above three categories over the last five years is brought out in the statement at Appendix IV. It would be seen from the statement that the average utilisation of capacity in each of the categories has been as under:—

Category I	45 to 48%
Category II	71 to 82%
Category III	17 to 26%

3. In Appendix V, a comparative statement of capacity utilisation in respect of nitrogen production in different countries has been provided. It would be seen from the statement that the capacity utilisation in India in Category II compares very favourably with World Standards. Even the cumulative average of capacity utilisation of all three categories in India for the year 1970, 1971 and 1972 is higher than the World average.

4. Several renovation/debottlenecking/modernisation measures as are necessary are nevertheless undertaken to bring up the capacity utilisation in Category I and also to improve the performance of the plants in Category II. Some schemes in this regard have already been implemented or are under implementation (details given in Appendix VI).

5. In addition, Government have negotiated a loan for 17 million U.S. dollars with the IDA to take measures for plant operations improvement. Various schemes for improving the performance of plants both in the private and in the public sectors are being taken up under this Plan Operation Improvement Programme. Government is also negotiating a further loan with the World Bank in the nature of a sectoral loan to finance debottlenecking and renovation programmes in the fertilizer industry. It is hoped that with these measures, the performance of operating units would improve substantially and stabilise as close to rated capacity as is possible.

6. Apart from maximising production in the operating units, Government have also launched a large programme for setting up additional fertiliser capacity. The details of the various fertilizer projects envisaged in the public sector in the Fifth Plan are given below:—

#### *(1) Bhatinda and Panipat Projects*

These projects, sanctioned in August, 1974 and February, 1975, respectively, envisage a capacity each for the manufacture of 2.35 lakh tonnes of nitrogen per annum in the form of Urea. The plants would use fuel oil as feedstock. Major portion of the foreign exchange component of these projects is being financed from Japanese Credit. National Fertilizers Ltd., the new public sector undertaking set up to implement the projects in N.W. part of the country, have entered into necessary contracts for process licences, design engineering, etc. for the two projects. Progress of construction of the two projects is satisfactory. The scheduled dates of completion of the projects are: Bhatinda: October, 1977; Panipat: February, 1978.

#### *(2) Trombay IV Expansion Project*

This project envisages the setting up of facilities for the manufacture of 3,61,000 tonnes per annum of nitro-phosphates. The project is financed under IDA credit of 33 million dollars and is expected to be completed by April, 1977. FCI have already ordered most of the equipments required for the scheme and the same are under erection.

#### *(3) Trombay V Expansion Project*

This project has been conceived mainly to supply the ammonia required for the Trombay IV Expansion Project and Urea. FCI

have already issued invitation to tender for the ammonia plant to pre-selected parties.

#### (4) Nangal Expansion

The project envisages the setting up of additional facilities in existing unit at Nangal for the manufacture of urea. This expansion is to be based on fuel oil as feed-stock. The project is financed under a credit from IDA, and is expected to be completed in mid 1977.

In the private sector, M/s. GSFC have been issued a Letter of Intent for setting up another unit for the manufacture of 4.45 lakhs tpa of ammonia and 5.28 lakhs tpa of urea. This project is based on fuel oil as feed-stock. A letter of Intent has also been issued to M/s. Shaw Wallace & Co. for setting up a plant for manufacture of 4.45 lakh tpa of ammonia and 6.6 lakh tpa of urea. This project is based on fuel oil as feed-stock. M/s. Sri Ram Chemicals have been issued a Letter of Intent for setting up of additional facilities at Kota Rajasthan, for the manufacture of 4.45 lakh tpa of ammonia and 6.6 lakh tpa of urea, based on fuel oil as feed-stock. M/s. IFFCO have been issued a Letter of Intent for setting up a plant in U.P. for manufacture of 4.95 lakh tpa of urea.

Government shares the concern of the Committee that additional fertilizer capacity should be set up in the country on a crash basis so that the import of fertilizers to meet the country's demand is progressively reduced and the country becomes as near self-sufficient in fertilizers as possible at an early date. In any appraisal of the growth of the fertilizer industry, it would have to be appreciated that the industry is highly capital intensive with a long gestation period. A plant of the standard size, i.e., with a capacity of 900 tonnes based on naphtha would cost anything around Rs. 150 crores; the out-lay on a plant based on fuel oil or coal would be even more. In this situation, the building up of additional capacity would necessarily be to a large extent influenced by the resources position. It would, however, be the constant endeavour of Government to augment fertilizer capacity with due regard to the availability of resources.

[Ministry of Petroleum and Chemicals O.M. No. M-32012/2/75/Ferts. III dated 15-11-1975].

**Recommendation (Serial No. 8, Paragraphs 3.75 and 3.76)**

The Committee regret to note that though Ammonia Chloride Plant was expanded on the basis of an anticipated availability and supply of hydrochloric acid under the expansion scheme of Travancore Cochin Chemicals Limited, no formal agreement was signed by the FACT with the Travancore Chemicals Limited for the additional supply of hydrochloride acid by the T.C.C.

As against the anticipated supply of 16,500 tonnes of hydrochloric acid per year, the actual supply of acid was only 6,616 tonnes in 1970-71, 6,880 tonnes in 1971-72, 5,936 tonnes in 1972-73 and 6,749 tonnes in 1973-74 respectively. Thus, actual supply of acid by the TCC was far less than the total requirements during the years 1970-71 to 1973-74, with the result there has been a loss of production of ammonium chloride in the FACT. Not only this, the price of hydrochloric acid to be charged by the TCC was stated to be in dispute. The Committee are informed that the expansion of FACT was undertaken to take care of further production of hydrochloric acid plant expansion of TCC and since Hydrochloric acid was causing a disposal problem to TCC, a decision was taken between Kerala Government and the FACT authorities to expand the plant and an understanding was arrived at that further acid produced by TCC would be made available to FACT. Although the production of TCC is now stated to have improved, the price of hydrochloride acid to be charged by TCC to FACT still remains a serious problem. The Committee are informed that negotiations for arriving at an amicable solution have so far eluded settlement. The Committee fail to appreciate the reasons which prompted FACT to feel so much concerned about the further production of hydrochloric acid by TCC as to agree to expand its own ammonium chloride plant at a cost of Rs. 19 lakhs even without entering into a firm agreement with TCC for the supply of acid at a reasonable price. The result is that FACT funds itself in quandry and even now no settlement has been arrived at either in regard to the price or an assured supply. The Committee should be informed of the results. The Committee recommend that the Ministry should take up the question of settlement of price with the Government of Kerala and resolve the deadlock so that FACT may be assured of its supply of hydrochloric acid regularly at the agreed price.

### **Reply of Government\***

The dispute between FACT and TCC has already been referred, with the consent of the Government of Kerala, for arbitration to Shri K. Balachandran, former Secretary, Department of Fertilizers and Chemicals. As the matter is already under arbitration, it is not considered appropriate at this stage to take up this question directly with the Government of Kerala.

[Ministry of Petroleum and Chemicals O.M. No. M-37012/2/75-Ferts. III, dated 29th October, 1975].

### **Further information called for by the Committee**

When is the award expected to be received?

[L.S.S. O.M. No. 16-PU/75, dated 27-12-1975].

### **Further reply of Government\***

The arbitration proceedings have commenced, but it is difficult to indicate at this stage, when exactly the award is expected to be received.

[Ministry of Petroleum and Chemicals O.M. No. M-32012/2/75/Ferts. III dated 15-11-1975].

### **Recommendation (Serial No. 9, Paragraph 3.88)**

The Committee note that ammonium sulphate is produced by two processes—300 tonnes per day by gypsum process and 300 tonnes per day by direct neutralisation process. Although the Sharma Committee recommended production of ammonium sulphate by gypsum process on the ground that 1 tonne of sulphur can produce more end products if sulphuric acid made out of it is utilised for production of ammonium phosphate and gypsum which is a by-product can be used in the production of ammonium sulphate, the Committee note that a Committee of Directors recommended in August, 1969, the direct neutralisation process because of the continued operation of the gypsum process plant at low efficiency and so long as sulphuric acid was available at reasonable prices. The Committee have given their comments separately in regard to the performance of sulphuric acid plants. The Committee find that the cost of production of ammonium sulphate by the direct neutralisation process during the years 1970-71 to 1973-74 was more than by the gypsum process. While the cost of production by gypsum pro-

cess was Rs. 400 during 1970-71, Rs. 408 during 1971-72 and Rs. 478 during 1972-73, the cost of direct neutralisation process was Rs. 420 in 1970-71, Rs. 433 in 1971-72 and Rs. 493 in 1972-73. The Committee are informed that the average price of sulphur used in direct neutralisation process decreased from Rs. 350 in 1970-71 per tonne to Rs. 327 per tonne in 1972-73. The Committee find that inspite of fall in the average price of sulphur during 1970-71 to 1972-73, the cost of production of direct neutralisation process is higher than that by the gypsum process. The Committee are, therefore, not able to appreciate the justification given for taking to neutralisation process on the ground of reasonable price of sulphur/sulphuric acid. The Committee recommend that FACT should consider the economics of the production of ammonium sulphate by the two processes taking into account all the relevant factors and adopt a process which will enable production of ammonium sulphate at an economic price.

### **Reply of Government**

As recommended by the Committee, FACT has worked out the relative economics of the production of ammonium sulphate by direct utilisation and gypsum route and has found that the gypsum route is more economical. However, the company has so far not been able to maximise production of ammonium sulphate through the gypsum route on account of inadequate availability of the right quality of gypsum and the constraints in the chalk filters. The company is initiating action to overcome these constraints with a view to maximising ammonium sulphate production through the gypsum route.

[Ministry of Petroleum and Chemicals O.M. No. 37012/2/75/  
Ferts. III, dated 15-11-75].

### **Recommendation (Serial No. 10 Paragraph 3.89)**

The Committee note that FACT has been importing rock phosphate from Morocco on the plea that the experiment of using rock phosphate from Rajasthan was tried in 1969-70 but not found economical. Moreover the production of rock phosphate in Rajasthan was 'limited'. The Committee understand that the mining of rock phosphate has been taken up in a big way by a State Undertaking under the Rajasthan Government and in fact they are looking out for users for consumption of this important raw material. The Committee feel that when rock phosphate deposits are available within the country there is no reason to spend precious foreign exchange on its import. The Committee also feel that with the advance in technology it should

have been possible to modify, if necessary, the existing plants so as to utilise the indigenous rock phosphate even if marginally inferior rather than expend scarce foreign exchange in imports.

### **Reply of Government\***

Government fully share the concern expressed by the Committee over the need to utilise to the maximum extent possible the indigenous deposits of rock-phosphate. Government have taken concerted measures to step up the utilisation of indigenous rock-phosphate for the manufacture of phosphatic fertilizers in India and it is expected that as a result of the various measures, the phosphatic manufacturers would obtain at least 50 per cent of their requirement of rock-phosphate from Rajasthan. In view of the physical and chemical characteristics of the Rajasthan rock-phosphate such as High Silica content, low reactivity, hardness etc., Rajasthan rock cannot by itself be used for the manufacture of phosphatic fertilizers and has to be blended in suitable proportion with high grade imported rock.

It is relevant to mention here that even when the production of rock-phosphate from Rajasthan is stepped up from its present level of 4 lakh tonnes to about 7.5 to 8 lakh tonnes of rock phosphate per annum, the country would still have to import a substantial portion of its requirement from abroad. It is envisaged that by 1978-79, the total requirement of rock-phosphate would be about 30 lakh tonnes while the production of beneficiated rock phosphate from Rajasthan would be of the order of 7.5 lakh tonnes per annum. Nevertheless, Government would take all possible steps to exploit the indigenous resources fully so as to reduce imports to the minimum level possible.

[Ministry of Petroleum and Chemicals O.M. No. 37012/2/75/  
Ferts. III, dated 15-11-75].

### **Recommendation (Serial No. 11, Paragraph 3.90)**

Since the demand for ammonium sulphate for agricultural production is going up, the Committee would like Government to thoroughly examine the feasibility and economics of achieving higher production in ammonium sulphate either by expansion of the existing units in FACT etc. or by location of new units near the source of rock phosphate which is raw material for this industry. The Committee understand that this matter has been long pending with the various Departments of the Government of India and they recom-

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\*Not vetted by Audit.



mend that a High Powered Committee of technical experts, including representatives of the Planning Commission and the Ministry of Finance may be constituted to go into the matter in all its aspects and give a concrete plan of action within six to nine months. The Committee would like to be informed of the precise action taken in pursuance of the above recommendation.

### Reply of Government\*

In planning the creation of additional fertilizer capacity, the product pattern is kept in view with due regard to factors like plant location, availability of raw material and the agronomic requirements of the economic marketing zone that the particular plant is intended to serve. Thus while planning additional capacity if it is found that ammonium sulphate is necessary to meet the agronomical requirements of a particular crop area, due consideration is given to this aspect. It may, however, be mentioned that ammonium sulphate is a low nutrient fertilizer (i.e. with 21 per cent nitrogen content fixed in high cost sulphur) and the cost of production is also relatively high. Hence, there is a general preference for high analysis fertilizer like urea which contains 46 per cent nitrogen. Further, it is economical to produce and transport high analysis fertilizers, rather than a low nutrient fertilizer like ammonium sulphate.

2. In regard to the Committee's observation about the new plants near a source of rock-phosphate which is a raw material for this industry, it may be mentioned that ammonium sulphate can be produced either through the direct neutralisation process or through the by-product gypsum route. Rock phosphate is not, therefore, directly used for the manufacture of ammonium sulphate and is relevant for the production of ammonium sulphate only to the extent that by-product gypsum is obtained from the production of phosphoric acid based on rock phosphate. In choosing the process for the manufacture of ammonium sulphate, factors such as the location of the plant, the nature of the products to be manufactured and the source of raw materials etc., will have to be taken into account.

3. As stated separately in reply to Recommendation No. 10, the country's requirements of rock phosphate cannot be met entirely out of the indigenous deposits and substantial imports would, therefore, have to continue. Nevertheless, the expeditious and efficient exploitation of indigenous deposits at Jhamarkotra is being taken on hand. As substantial deposits of iron pyrites are also located in the Saladi-

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\*Not vetted by Audit

pura area of Rajasthan, Government is also considering the possibility of setting up a fertilizer complex in Rajasthan based on Rajasthan rock and on sulphuric acid derived from the pyrite deposits of Saladipura. In planning the fertiliser complex, consideration would also be given to the possibility and the desirability of manufacturing ammonium sulphate as product.

4. An Expert Group has been constituted to plan the strategy for advance action on the VIth Plan Fertilizer Programme and to suggest the location of additional capacity, product pattern etc. taking into account *inter alia* the availability of raw material, the agronomic requirements region-wise and availability of infra-structure facilities. The Committee's recommendation to set up additional facilities for the manufacture of Ammonium Sulphate would be placed before the expert group for consideration while drawing up the blue-print for the VIth Plan.

[Ministry of Petroleum and Chemicals O.M. No. 37012/2/75/  
Ferts. III, dated 15-11-75].

#### **Recommendation (Serial No. 17, Paragraphs 3.162 to 3.170)**

The Committee note that in view of the present uneconomic working of FACT due to very low level of production in some of the old plants, heavy over-heads, high maintenance cost and low stream efficiency, a scheme for diversification of production at an estimated cost of Rs. 2811 lakhs (including a foreign exchange element of Rs. 482.5 lakhs) has been formulated in order to improve the profitability of the FACT.

The Committee further note that this diversification proposal has been mooted after four stages of expansion each one of which especially the last two, had been planned and implemented to make the FACT correct the imbalance in the demand and supply of various intermediate products so as to make the Udyogamandal unit economically viable, but none of with seem to have achieved the desired results.

The Committee were informed that the need for diversification also arose because the conditions which were visualised in the fourth stage expansion when it was planned in 1969, had changed considerably since then and the economics of manufacture of fertilizers had also changed due to technological changes.

The Committee feel doubtful whether the expansion schemes have been correctly formulated at all after analysing all the defi-

ciencies and taking into consideration the condition of the plants and their capacity for production.

The Committee are informed that the Udyogamandal units "production performance has been at a relatively low level of capacity utilisation during the past 7 to 8 years even though during this period two expansion programmes have been completed" because of the inter-dependence of as many as 20 plants of different vintages with varying capacities and different process routes all of which have to operate simultaneously to avoid constraints of raw material supply but their efficient working simultaneously is the biggest problem before the unit. The Committee are not sure whether addition of some more plants under the diversification proposal to the chain of 20 inter-dependent plants will be able to improve the situation and in the context of the past history of this unit the diversification scheme will not meet the same fate as the earlier schemes.

The Committee are informed that according to the feasibility report prepared in April, 1971 the diversification proposal to produce Methanol involved an expenditure of Rs. 348 lakhs (including foreign exchange element of Rs. 78.5 lakhs) and the overall profit of the Udyogamandal Unit was expected to improve by Rs. 563 lakhs in the case of heavy petroleum feed stock and in other case the improvement in profit is expected to be Rs. 350 lakhs with an investment of Rs. 250 lakhs.

The Committee are not sure whether the results of the feasibility study conducted in April, 1971 will still hold good in view of escalation in cost of labour, feed stock, etc. The Committee would, therefore, like that the Government should before going ahead with the scheme have a second look at the economics of the project including its effect on the over-all profitability of Udyogmandal Division after making sure about the availability of raw materials and the demand for the product in the country at this stage. The Committee also recommend that the full details of the scheme along with the economics thereon may be brought to the notice of Parliament.

The Committee thus find that the FACT has been taking up schemes for expansion in succession with a view to correcting the imbalances and in spite of this, utilisation of the plants had been low and the imbalances still persist. Before consolidating the position taking into account all the expansion schemes, the FACT is now going in for diversification. The Committee would like that there should be no further expansion scheme till the production in the present set up stabilises.

The Committee recommend that Government should consider appointing an Expert Committee to critically go into the causes of the failure of the Udyogamandal Unit even after the different stages of expansion, and also examine the various aspects of diversification schemes including the economic thereof and the effect of the diversification on the overall profitability of the Unit. The Committee would like to be informed of the action taken in pursuance of the recommendation within three months of the Report.

### **Reply of Government\***

An Expert Committee set up by the F.A.C.T. management is already looking into the technological, managerial and other problems limiting production in the Udyogamandal unit, as also the measures needed to overcome them. This Committee has so far examined the working of the phosphoric acid, sulphuric acid and ammonia phosphate plants of the Udyogamandal Division. The Committee is expected to complete its work shortly.

Another Committee has also been set up by the F.A.C.T. Management to examine the various aspects relating to the diversification programme, including the economics thereof and the effects of diversification on the overall profitability of the unit. This Committee is also being asked to look into the various considerations that led to the adoption of the debottlenecking scheme in the Udyogamandal Division and their impact on production, etc.

[Ministry of Petroleum and Chemicals O.M. No. 37012(2)/75-Fert. III, dated 30th September, 1969]

### **Further information called for by the Committee**

A specific reply to the recommendation that there should be no further expansion till production is stabilised may be given.

[L.S.S. O.M. No. 16-PU/75 dated 22-10-75]

### **Further reply of Government\***

Government share the concern expressed by the Committee over the need to stabilise production in the existing plants of the company and are already taking steps in this direction. As the committee is aware, production in the Udyogamandal unit of FACT has not been at the optimum level due mainly to the ageing condition of the plants and inter-dependence of a large number of plants, some of which are very old. Various measures have been taken by the

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\*Not vetted by Audit.

company to improve production management and maintenance with a view to maximising production; renovation of some of the equipment is also being planned under the Plant Operation Improvement Programme financed by the IDA. Government have also sanctioned the establishment of facilities for the production of methanol as part of the diversification programme intended to optimise the utilisation of facilities at Udyogamandal and revamp the economics of the Unit.

Production in Cochin I unit of FACT has also been low due to technological constraints and equipment failures. A time-bound programme has been drawn up to carry out modifications in the plant and equipment to overcome these constraints and achieve and stabilise production at near rated capacity. These modifications which are being financed under the Plant Cooperation Improvement Programme are expected to be completed within 18-24 month.

Government is conscious of the compelling need to stabilise production in the existing facilities. As recommended by the committee, an expert committee is being asked to critically examine the overall economics of the various stages of expansion in the Udyogamandal unit as also to have a hard look at the economics of further diversification schemes, including methanol. The company is also being advised to withhold the implementation of the methanol project until the report of the expert committee becomes available and a final decision thereon is taken. Expansion schemes are sanctioned only after a critical examination of the economics of the scheme and all other relevant factors. Before sanctioning further expansion scheme for FACT, Government would also take into consideration the report of the expert committee and will also ensure that the expansion scheme apart from being advantageous does not in any way affect the process of stabilising production at optimum levels in the existing facilities.

[Ministry of Petroleum and Chemicals O.M. No. 37012/2/75/  
Ferts. III dated 15-11-75]

### **Recommendation (Serial No. 24, Paragraph 6.63)**

The Committee also note that the project is based on imported ammonia for which an agreement had been signed with M/s. Norsk Hydro of Norway. The Committee were informed that offers for supply of liquid ammonia were originally handled by the Fertilizer Corporation of India from where they were transferred and Chairman and Managing Director of FACT was authorised in April, 1972

to directly negotiate with the foreign firm. Accordingly, negotiations were carried out from June, 1972 and acceptance was given to the foreign firm in October, 1972. When the foreign firm suggested that the contract be formally signed in November, 1972, this could not be adhered to due to certain difficulties in the working of the Udyogamandal Unit and therefore a date convenient to both parties was fixed in February, 1973. The committee find that in January 1973 the foreign firm intimated that the terms settled earlier had not been accepted by their Board of Directors and a revised offer was given by them in March, 1973. This revised offer was not, however, acceptable to the Board of Directors of the FACT but later they had to accept the rates in the over-all national interest on the advice of the Ministry and the contract was concluded. It was stated that the earlier settlement with the foreign firm had a provision that it was subject to the approval of the respective Board and therefore even if FACT had accepted the offer in November 1972, it would not have made any difference. The Committee however find that even after the finalisation of the contract, the foreign firm (M/s. Norks Hydro Norway) was unable to supply ammonia at the agreed rates and had asked for an escalated price and stated that they were not bound by the contract because of the world situation in petroleum and petroleum products. The Committee feel that in view of the escalation in prices of ammonia the cost of production and the economics of the project would be adversely affected. The Committee recommend that Government should make use of the good offices of the IDA to persuade the foreign firm to supply ammonia at the already agreed price and also ensure timely and assured supply of ammonia in future.

### Reply of Government

FACT have entered into a contract with M/s. Norsk Hydro of Oslo for the purchase of ammonia for a period of four years commencing from 1st January, 1975. According to the contract, the supply of the contracted quantity of 45,000 tonnes of ammonia, ± 10 per cent at the buyer's option, during 1975 was to be at a fixed price of Qatar Rials 183 per tonne; the prices for the supplies to be effected in the subsequent years was to be negotiated between the two parties prior to the beginning of each year. Towards the end of the year 1974, Norsk Hydro gave notice to FACT to the effect that due to the escalation in the world market price of ammonia and due to the delays in the commissioning of the Qatar ammonia plant from where the supplies were to be effected, Norsk Hydro would not be in a position to fulfil the contract. Thereafter, prolonged negotiations were held between Norsk Hydro and FACT. In April, 1975, when the first shipment was due for loading strictly according to the contr-

act, Norsk Hydro informed FACT that the Qatar Govt. had banned the export of ammonia from Qatar Ammonia Co. at the original contract prices and that the price would therefore have to be renegotiated in accordance with the then existing market condition. Therefore, the advisability of insisting upon the strict implementation of the contract and, if necessary, taking the matter for international arbitration as against the advantages of buying ammonia at reasonable prices lower than the above ruling prices were considered both at the level of the company and by Government. It was felt that in view of the direction from the Qatar Government, Norsk Hydro may be in a position to resort to the force majeure clause and frustrate any move to obtain redress in an international court of arbitration. Accordingly, FACT was asked to negotiate the most favourable terms possible for the quantity of ammonia required during the year. After prolonged negotiations the company signed an addendum to the original contract providing for supply of 18000 tonnes  $\pm$  10 per cent of ammonia by Norsk Hydro during the year 1975 at a price of 330 Qatar Rials per tonne FOB (83 to 88 dollars).

It would be appreciated that the international price then ruling was around 400 dollars per tonne of ammonia with the sharp escalation in the price of ammonia and finished fertilizers all over the world consequent upon the oil crisis, many of the suppliers had gone back upon firm contracts and there was a situation of uncertainty in the world market. In this situation, it was felt that no useful purpose would be served by insisting on strict compliance of the contract. Government of India in fact agreed not only to renegotiate this contract but many other contracts for the purchases of finished fertilizers.

As stated earlier, M/s. FACT have a long-term contract for purchase of ammonia from Norsk Hydro and is assured of regular supplies. Government of India would ensure that the price for the supplies to be made each year, which is to be negotiated at the beginning of the year, would be reasonable.

[Ministry of Petroleum & Chemicals O.M. No. M-37012|2|75-Ferts. III dated 15-11-75]

#### **Recommendation (Serial No. 25, Paragraph 7.20 to 7.22)**

The Committee note that the FACT Engineering and Design Organisation (FEDO) was formed in 1964 as per decision of the Government of India taken in September 1963 to construct at least three complete fertiliser plants before the end of Fourth Five Year Plan (1966-71). In pursuance of this decision the organisation was gradually developed and it became a full fledged division of FACT

in 1966. But of the four fertiliser projects (Cochin, Madras, Mangalore and Tuticorin), for which the project reports were prepared by FEDO, only the construction and management of the Cochin Project was entrusted by the Government to the Undertaking in July, 1965, though it had undertaken planning designing and construction of various other works since then by its own efforts. The Committee note that the income of FEDO from engineering services has gone down from Rs. 103.64 lakhs in 1970-71 to Rs. 67.67 lakhs in 1973-74, and the profits of the organisation have also gradually decreased from Rs. 1.50 lakhs in 1970-71 to a bare Rs. 8,000 in 1973-74. As admitted by the Chairman-cum-Managing Director though in the beginning FEDO had enough workload, but of late FEDO "was coming to a low level of utilisation. We have not a few orders recently. We expect to get some fresh orders also. Probably we can get going in the next year. For the future it will depend on whether we could get more orders".

The Committee are informed that five projects estimated to cost about Rs. 60 crores are currently being done by the FEDO. In addition, some jobs including diversification programmes are also being undertaken by the FEDO. The FEDO is also considering the feasibility of taking up design and engineering work for chemical industries other than fertiliser industry. It has been stated that FACT is considering the question of effecting economics in FEDO, taking all the factors into account. The Committee find that in addition to FEDO, the planning and development division of the Fertiliser Corporation of India, and the Engineers India Limited are also engaged in design and engineering work for chemical and fertiliser industries. The Committee note that when the FEDO was originally conceived, it was contemplated that this organisation would specialise in the design, engineering, construction and erection of ammonia plants based on naphtha as feed stock as also, the plants for production of items like sulphuric acid, phosphoric acid and phosphate whereas the Planning and Development Division of the FCI would concentrate their efforts in the field of other feed stock, ammonia synthesis, manufacture of urea, etc. Although fertiliser capacity in the country is being developed to bridge the gap between demand and supply to cover the increased requirements and a number of plants are being set up based on different feed stock, according to Government there would be limitations in the different design and engineering organisations developing well defined areas of specialisations with different feed stock. However, it has been agreed by the Ministry that all efforts are required to ensure that facilities available with the different design and engineering organisations are utilised to best advantage and at the same time get the benefit of alternative technologies. The Committee, therefore, recommend



that Government/FACT should examine the economics of continuing this organisation with reference to utility of the organisation and the volume of work to be handled by it and take a decision soon.

The Committee feel that FEDO should have been built up from a sound nucleus organisation and allowed to expand only after most careful assessment of the workload from time to time in order to obviate overstaffing and frustration creeping over the staff.

The Committee find that there are number of consultancy design and engineering organisations in the field. The Committee feel that now there is need for Government to examine in depth and decide the scope and area of consultancy of the different design and engineering organisations. The Committee recommend that a High Powered Expert Committee should be set up to review the role scope and area for consultancy, design and engineering in the fertiliser industry in public sector so that the existing expertise and the resources are utilised to the best advantage of the country. The Committee would like to be informed of the report and the action taken thereon within six months.

#### **Reply of Government\***

Government are constituting a High Powered Expert Committee to review the role, scope and area for consultancy design and engineering in the fertiliser industry in the public sector so that the expertise available with the different design and engineering organisations in the public sector is utilised to the country's best advantage. In the light of the Expert Committee's recommendations the role, set up and other aspects relating to FEDO will be examined.

[Ministry of Petroleum and Chemicals O.M. No. M-37012(2)/75-Fert. III dated 15th November, 1975].

#### **Comments of the Committee**

Please see paragraphs 1.23 to 1.27 of Chapter I of the Report.

#### **Recommendation (Serial No. 29, Para 8.45)**

The Committee note that the agreement entered into by FACT with M/s. Southern Gas Limited for sale of oxygen provided that irrespective of the actual off-take, the party would be billed for a

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\*Not vetted by Audit.

minimum quantity of 56,630 c.m. per month. The actual off-take by the party from the commencement of supply to 31st March, 1970 was substantially lower than the minimum quantity and the value of the shortfall was Rs. 5.6 lakhs. Even after 31st March, 1970, every year there had been shortfalls and from 1970-71 to 1973-74 the quantity of shortfall was 14.78 lakhs c.m. valued at Rs. 5.4 lakhs. When the FACT billed for the amount, according to the agreement, the party had not so far paid the amount on the ground of (a) poor quality of the product, (b) force majeure conditions, (c) failure of the FACT to supply the minimum quantity. The Southern Gas Limited contended that since FACT failed to supply oxygen and therefore, for such periods of failure no minimum guarantee was payable. It was also admitted by FACT that though the quality of gas suffered before November, 1967 FACT was able to maintain the purity thereafter. There were limitations in the supply prior to June, 1973 as FACT was requiring the oxygen for its own plants. The Committee are informed that the question was being examined in consultation with the FACT's attorneys and it was expected that a settlement would be reached by making due allowances for the period during which either party was not able to fulfil its obligations. If mutual agreement was not reached, it was stated that the matter would be settled by arbitration. The Committee would like to be informed about the settlement. The Committee however, see no justification for FACT entering into long term contract for 30 years at a stretch without even an escalation clause and with terms and conditions which FACT could not enforce especially when other parties were able to offer better prices. The Committee are not sure whether financial implications of such a long-term commitment had been examined in depth keeping in view the utilisation of the capacity of the FACT plants and the cost of production. The Committee recommend that this matter should be thoroughly examined from all aspects and the Committee informed of the results.

### **Reply of Government**

The company is still negotiating a settlement with M/s. Southern Gas. The Company is being advised to settle the matter at the earliest by mutual negotiations or arbitration. The company is also being asked to critically re-examine the financial and other aspects of a long-term contract with M/s. Southern Gas.

[Ministry of Petroleum and Chemicals O.M. No. M-37012/2/75-Ferts. III, dated 15th November, 1975]

### **Comments of the Committee**

Please see paragraphs 1.28 to 1.30 of Chapter I of the Report.

#### **Recommendation (Serial No. 31, Paragraph 10.15)**

The Committee regret to note that FACT has been incurring huge losses on its manufacturing activities and the cumulative loss on 31-3-1974 is over Rs. 11 crores. The loss has increased from Rs. 1.8 crores in 1970-71 to Rs. 3.8 crores in 1971-72 and it came down to Rs. 2.3 crores in 1972-73 and Rs. 1.8 crores in 1973-74. The main reasons for the losses have been attributed to low utilisation of capacity and consequential loss in production, maintenance problems, failure of some critical equipments besides power shortage and labour troubles. The Committee are informed that the loss in 1972-73 came down because of certain economy measures and with certain rationalisation of the distribution and marketing function. The Committee are constrained to observe that inspite of the Four Expansion Schemes which FACT had implemented, there had been gross under-utilisation of capacity, excess consumption of raw materials, losses on account of stores, surplus in man-power and the manufacturing and marketing expenses were very much on the high side. The Committee, therefore, feel that unless some concrete and concerted efforts are made to improve the performance and reduce costs, rationalise the man-power and control, consumption of materials, it will be difficult for FACT to come out of the red. The Committee would like to be informed of the measures initiated in this regard.

#### **Reply of Government**

The Government and the company share the concern expressed by the Committee over the need to improve performance and reduce cost. The company has already initiated action in this regard and has taken steps to improve production management and maintenance programming. With improved maintenance and close process control, excess consumption of raw material has already been reduced to a considerable extent and this trend is being maintained. With progressive improvement in plant operation and plant maintenance, it is envisaged that the ratios of consumption of raw material would be maintained within the budgetted limits. The procedure for studying variations between actual consumption and attainable/ designed consumption has been stream-lined and is being rigidly followed. Periodical variance reports are also prepared and submitted to various authorities for ensuring better control.\*

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\*At the time of factual verification Audit intimated that periodical analysis of variances is made between actual consumption and budgetted consumption, the latter being higher than designed/attainable ratios fixed in March, 1971 and not between actual and designed/attainable as stated.

On the basis of Works Study carried out by the Industrial Engineering Deptt., the surplus staff in the Udyogamandal Division has also been identified and action is being taken to re-deploy the surplus staff in the other units so as to arrive at a rational and economic organisational structure. The management organisation is also being suitably restructured to bring about better results.

The Ministry is also closely monitoring the production performance of all the fertilizer units including FACT with a view to offering all possible assistance to overcome constraints and maximise fertilizer production. With the measures initiated by the company and assistance rendered by the Ministry from time to time, it is expected that the company would succeed in optimising capacity utilisation and reducing cost.

[Ministry of Petroleum & Chemicals O.M. No. M-37012/2/75-Ferts. III, dated 15-11-75]

**Recommendation (Serial No. 35, paragraphs 11.29 to 11.35)**

The Committee note that the inventory of stores has shown a decrease from Rs. 15.29 crores as at the end of 1970-71 to Rs. 8.85 crores on 31st March, 1974. The value of spares include in the inventory however showed an increasing trend from Rs. 108 lakhs representing 42.8 months consumption as on 31-3-71 to Rs. 185 lakhs on 31-3-74 representing 71 months consumption. Even with reference to cost of machinery, the percentage of spares has indicated an increase from 6.2 per cent to 7.9 per cent. The Committee are informed that the records are not maintained to indicate the spares received with plant and machinery as distinct from those purchased later. Although the management has not considered it necessary to do so, the Committee feel that in the interest of regulating purchase of spares such a segregation is essential. The Committee hope that action would be taken to segregate the spares accordingly.

The Committee regret to note that out of 31,149 items on stock on 31-3-70 minimum limits have been fixed only in respect of \*14,500 items. The Committee are informed that an Inventory Control Committee was formed to fix the maximum and minimum levels for all store items. This Committee has just finalised the work relating to identification of obsolete and surplus stores and the other work is yet to be taken up.

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\*At the time of factual verification FACT intimated that presently minimum levels have been fixed for 2500 items approximately.

The Committee understand that a Review Committee appointed by the Chairman-cum-Managing Director identified value of obsolete and surplus stores on 30th September, 1970 as 20.83 lakhs.

The value of such surplus and obsolete items has been reduced to 12.34 lakhs. The Committee are informed that the Inventory Control Committee are reviewing 'A' Value items to fix the maximum and minimum limits and also to locate the surplus. The Committee recommend that the Inventory Control Committee should finalise its work soon and management should fix the maximum and minimum limits for all the stores without delay. The management should take action to circulate the list of surplus stores to all the public undertakings including fertilizer producing units with a view to disposing the surplus items.

The Committee also note that the percentage of items physically verified to the total number of items in store was 20.93 per cent on 31-3-71, 32 per cent on 31-3-72 and 29.82 per cent on 31-3-73. The Committee regret to note that the value of items verified in any year is not available. The Committee are surprised that the discrepancies noticed as a result of verification have also been not adjusted in accounts from 1968-69 to 1972-73. The Committee however note that in respect of 8,229 items verified during 1972-73 and 17268 items verified during 1973-74 there had been shortage to the extent of 1,047 items of value Rs. 9.76 lakhs in 1972-73 and 154 items valuing Rs. 3.77 lakhs in 1973-74 respectively. The Committee are informed that the Management's assessing the reason for the shortages. The Committee would like the management to investigate into the reasons for the shortages and fix responsibility therefor. The Committee would like to be informed of the results.

The Committee also find that in regard to raw materials, sulphur and rock phosphate, the inquiry made by a Committee of Directors revealed shortages of stock of sulphur and rock phosphate valued Rs. 113.53 lakhs during 1969-70 and 1970-71 out of which shortages of value Rs. 46 lakhs were written off, and that the Government handed over the case to the Central Bureau of Investigation for inquiry. The Committee would like to be informed of the findings of the inquiry and the action taken by the management in pursuance thereof.

The Committee note that as a result of review by a departmental Committee in May, 1970, 8,700 items of stores and spares valued at Rs. 80.75 lakhs out of 30,596 items of stores and spares of value of Rs. 336 lakhs were reported to have not moved for 5 years or more.

Out of these slow moving stores, it has been reported that stores valued at Rs. 21.34 lakhs were declared obsolete by the same Committee. Even after the sale of some stores at a loss of Rs. 1.74 lakhs, there are still obsolete stores worth Rs. 18.58 lakhs. In regard to stores other than machinery stores and general stores another departmental committee is reported to be going into the question and its report is awaited. It is unfortunate that no time limit has been fixed for completion of the work by this Committee. The Committee recommend that the Departmental Committee should be required to complete its work soon, identify items of surplus obsolete stores other than machinery stores and general stores so that management can take action for disposal of such stores by diverting them usefully to other public undertakings.

From the foregoing, the Committee are led to conclude that the maintenance of store accounts and the inventory control in FACT has not been quite satisfactory. It is surprising that even the elementary requirements of fixation of maximum and minimum limit of stores for purposes of control has not been taken care of. No action has been taken in respect of results of physical verification and there had been accumulation of obsolete and surplus stores resulting in blocking up of capital. It is only in 1973 that the management has thought of the Inventory Committee to revamp the whole system. The special audit conducted in regard to stores has also revealed a number of irregularities. These have been dealt with in a separate section. The Committee recommend that Government/FACT should critically examine the reasons for this state of affairs and take into account the results of investigations by special audit and the suggestions given by them so that the entire store system can before long be put in proper order.

#### **Reply of Government\***

The company has already taken action to segregate the spares and it is understood that, except for a few items, spares have been segregated in Udyogamandal and Cochin.

Action is also on hand for fixation of norms for arriving at the maximum/minimum levels for spares taking into account the consumption statistics and the lead time. This is likely to be completed by end of June 1976. In regard to surplus stores, detailed lists are, as recommended by the Committee, being circulated by the company among other fertilizer producing units in the Public Sector.

The management appointed a committee to examine the reasons for the shortages in stores and fix responsibility therefor. The

Committee's finding was that the shortages and surpluses were the cumulative effect of transactions spreading over a period from 1965-66 onwards and that these were within reasonable limits. On the recommendation of this Committee, the shortages have been written off by the Company's Board as losses. The Committee was also of the view that it was not feasible to identify the reasons for the shortages/surpluses. The Committee is separately taking action to fix maximum and minimum levels for inventory items.

In regard to the shortages in the stock of sulphur and rock-phosphate brought out by the Special Audit carried out in 1972, departmental action was initiated against the following six officers of the Company:—

1. Shri A. H. Kurien
2. Shri M. P. Narayana Pillai
3. Shri P. E. Thomas
4. Shri J. Ramachandran Nair
5. Shri P. N. Menon
6. Shri V. Sankaranarayanan

Of the above officers, Shri Kurien and Shri Narayana Pillai have since resigned from the services of the company. According to terms and conditions of their appointment, these officers could leave the services of the company three months after tendering their resignations. The resignation of these officers were accepted after consulting CVC. Action in respect of the other four officers has since been completed and with the approval of Central Vigilance Commission two of them viz. Shri P. E. Thomas and Shri J. Ramachandran Nair have been exonerated.\*

In regard to the then Managing Director and the then Finance Manager, who have since reverted to their parent cadres, the advice of the CVC, based on the recommendations of the CBI, has been conveyed to the respective cadre authorities for initiating appropriate departmental action.

The Company has now streamlined procedures for inventory control and is taking action to put the entire store system in proper order. A system of physical verification of inventory to be completed within a cycle of two years, has been introduced. The occurrence of obsolescence and surplus being a continuous phenomenon, an

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\*All the time of factual verification the Ministry of Chemicals and Fertilizers intimated that the nature of penalty in respect to the other two officers is being decided.

Officer on Special Duty has been placed in position to identify such obsolete and surplus items on a continuous basis and take steps for their speedy disposal.

[Ministry of Petroleum & Chemicals O.M. No. M-37012/2/75-Ferts. III, dated 30-12-75]

### **Comments of the Committee**

Please see paragraphs 1.40 to 1.57 of Chapter I of the Report.

### **Recommendation (Serial No. 36, Paragraphs 11.45 to 11.47)**

The Committee note that on the request of Ministry of Petroleum & Chemicals, a special audit (covering the period from 1st April, 1967 to 31st March, 1972) of high value items of stores and raw materials including sulphur and rock phosphate was conducted by associating technical members from the Ministry. The special audit has brought to light the following deficiencies in the stores procedures and accounts:—

- (1) No weighment of the raw materials carried by the boats to the factory was done and the quantity indicated in the bills of lading was shown as fully received. Payments to suppliers were made on the basis of the weights indicated in the bills of lading. Weights shown in the bills of lading and the weights originally determined on arrival were not reconciled.
- (2) Materials Receipt Reports for receipt of sulphur and rock phosphate shipments were issued after considerable delay ranging even upto one year.
- (3) Entries in stores ledgers have not been made in chronological order.
- (4) Theoretical consumption ratios were adopted from time to time including in some cases extra quantities to cover handling and other losses. This quantity was not however charged in the accounts. The stock at Udyogamandal had therefore been over stated in the accounts to this extent.
- (5) Rock phosphate was reported to have been washed down river due to collapse of retaining wall. No steps were taken to ascertain the quantity lost although remarks were made from time to time that rock phosphate was being washed down the river.
- (6) The methods of survey adopted for measurement of sulphur were not free from defects. The measurement



books containing the measurements in respect of surveys conducted up to 5th January, 1971 were not traceable and the loss of measurement books has not been investigated. On many occasions sulphur and rock phosphate were kept in open heaps and large quantities of gypsum were dumped in various parts of the township. For several years it was shown in the books although it was not physically available. Eventually a value of Rs. 6.12 lakhs was written off in accounts of March, 1970.

- (7) Discrepancies noticed between survey figures and book balances were not reconciled. The management went on certifying the book figures in spite of these being widely different from the actuals for purpose of annual accounts. It has been reported that the survey report figures were made to agree with the book figures.
- (8) As against shortage of Rs. 1.38 crores both in regard to rock phosphate and sulphur during the period 1967-68 to 1971-72, the value of stores written off in the accounts for 1969-70 to 1971-72 was Rs. 1.11 crores only although the quantity of shortage had been written off in full.
- (9) The quantities charged to accounts as consumed are higher than those calculated on the basis of reasonable consumption ratios for consumption of sulphur and rock phosphate, resulting in a loss of Rs. 43.25 lakhs in sulphur and Rs. 37.83 lakhs in rock phosphate. The difference might have been due to factors like pilferage/loss of raw materials, loss in process manufacture, accountal of less finished products than actual production.
- (10) There was no effective system of internal check on raw materials and efficiencies in their usage and on finished products.
- (11) There was no proper system of assessing the raw material requirements and for planning purchases which resulted in excessive stocks.
- (12) In regard to stores and tools and plant (a) for none of the item maximum limits were fixed, (b) Stores ledgers were in arrears, (c) bincards for about 6,000 spares and stores were continued to be maintained though the stores were

not physically available. Balances in respect of 4,000 items were shown without values.

- (13) In spite a system of perpetual stock verifications, only a small number of the total items was covered in any one year. The value of shortages in 1972-73 was of the order of Rs. 10.89 lakhs and excess Rs. 2.23 lakhs. The shortages and excesses noticed are still stated to be under investigation and no adjustments have been made.
- (14) Non-Moving stores which constituted 28 per cent of total value of stores accounted for more than Rs. 118 lakhs as on 31-3-1972. There was no systematic procedure in vogue for review of store items from time to time for purpose of locating surplus and obsolete stores.
- (15) No reconciliation of bincard balances with ledger balances was done.
- (16) Accounts of tools and plant were not properly reconciled.
- (17) Physical verification reports were not pursued centrally with the result that shortages had not been regularised. The value of such shortages as on 31-3-1972 was Rs. 23.80 lakhs. The Committee note that the whole matter was investigated by the CBI and based on their report departmental action had been initiated against some of the officers of the company. In so far as they pertain to the Managing Director and Finance Manager, the matter is stated to be under the consideration of the Central vigilance Commission.

The Committee are informed that the management is taking action on the observations/suggestions of special audit. The Committee recommend that the management should finalise action on all the points and furnish a report of compliance. The Committee also recommend that the FACT should streamline the procedures of purchase and store accounting, adopt modern methods of inventory control and take suitable measures to ensure that the defects pointed out do not recur. The Committee also emphasise the need for scientific assessment and proper account of sulphur and rock phosphate which are obtained through imports after expending huge foreign exchange. Since these materials are received in boats, there should be regular preshipment and after-shipment surveys to ensure that the quantities loaded are actually received. The Committee

would like that the FACT should consider the matter and take suitable precaution to see that no portion of the rock phosphate is washed away due to lack of adequate storage facilities.

The Committee are distressed to note that the management went on certifying the book balances for purpose of annual accounts in spite of the wide differences between the actuals and the book figures without investigating into the shortages. They would like that this should be specially investigated and the responsibility for this lapse fixed.

The Committee desire that the internal audit should also as a part of their work conduct a regular check of the store accounts and the working of systems and procedures, bring the defects and deficiencies to the notice of top management for remedial action. The Committee recommend that Government should keep a careful watch on the implementation of the suggestions given in the special audit reports and ensure that such irregularities do not recur. The Committee also recommend that for purposes of uniformity in the procedure for accounting of sulphur and rock phosphate which are the main raw materials in the manufacture of fertilizer, Government should consider issuing suitable instructions in the matter and review from time to time the implementation of these instructions. The Committee would like that the Central Vigilance Commission would expedite the matter. The Committee would also like FACT/Ministry to communicate the results of investigations and the action taken in this and all other matters enquired into by CBI.

### **Reply of Government\***

As intimated to the Committee, the company is taking action on the observations and recommendations of the special Audit. The company has been asked to draw up a time-bound programme for the implementation of the various recommendations of the special audit and place a status report every month before the Board of Directors and also before Government so as to enable the Board/Govt. to monitor the action being taken.

As stated in reply to recommendation No. 33 action is also on hand to strengthen the Internal Audit so as to enable the unit to make a satisfactory check of stores accounting and the working of other systems and procedures.

In regard to the responsibility for shortages, as the Committee is aware, the matter was investigated into by the CBI. On the basis of the report of the CBI and subsequent recommendations thereon by the Central Vigilance Commissioner, departmental action

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\*Not Vetted by Audit.

is being initiated against the officers of the Company found, *prima facie*, to be responsible. As regards the then Managing Director and the then Finance Manager of the Company, who have since reverted to their parent cadres, the recommendations of the CVC have been conveyed to the respective cadre authorities for initiating appropriate departmental action.

In regard to the Committee's recommendations that uniform procedures for accounting sulphur and rock phosphate should be prescribed by Government a committee is being constituted to look into all relevant aspects and make suitable recommendations.

[Ministry of Petroleum & Chemicals O.M. No. M-37012/2/75-Ferts. III, dated 21-11-75]

#### **Further information called for by the Committee**

Please indicate the nature of departmental action taken against each officer of the company in the light of the report of the CBI and Central Vigilance Commission.

Also please state the nature of departmental action taken against the then Managing Director and the Finance Director by the authorities of the Cadres to which they belong.

(L.S.S. O.M. No. 16-PU/75, dated 27-12-75)

#### **Further reply of Government**

The then Managing Director Shri M. K. K. Nayar, is being prosecuted under the Prevention of Corruption Act 1947 in the Court of Special Judge, Ernakulam. The Cadre Authority (in Department of Personnel & Administrative Reforms) has stated that the Central Vigilance Commission have agreed to the Departmental action being deferred till Court proceedings are completed. As regards Shri T. C. Krishnan, the then Finance Manager is concerned, the Comptroller and Auditor General, has stated that an enquiry officer has been appointed to enquire into the charges against him. Further developments are awaited.

Show cause notices have been issued by the FACT to the two officers of the company. The company has intimated that final decision is expected to be taken shortly.

[Ministry of Chemicals & Fertilizers O.M. No. 37012/2/75-Ferts. III, dated 15-11-75]

#### **Comments of the Committee**

Please see paragraphs 1.58 to 1.67 of Chapter I of the Report.

NEW DELHI;  
March 10, 1976.

Phalgun 20, 1897 (S).

NAWAL KISHORE SHARMA,  
Chairman,  
Committee on Public Undertakings.

## APPENDIX I

[vide reply to recommendation of Serial No. 2]

*Ministry of Finance Bureau of Public Enterprises (Production Division) O.M. No. 2/1/70-Prod., dated the 17th August, 1970 regarding: Fifty-ninth Report of Committee on Public Undertakings on Fertilizer and Chemicals, Travancore Ltd.*

The undersigned is directed to say that while going through the working of the FACT the Committee on Public Enterprises have observed as follows:

“In the context of inadequacy or lack of power supply faced by FACT, the Committee suggested that no project or expansion of a project should be undertaken, in future, unless power supply was assured with a guarantee, where it was to be supplied by another authority to the project.”

2. In view of the above recommendation it is requested that the Ministry of Petroleum & Chemicals, Mines and Metals, Department of Industrial Development, etc., while sanctioning new proposals or expansion proposals, may keep in mind the power supply factor and unless power supply is assured with a guarantee no sanction for new project or expansion of a project may be given.

Receipt of this letter may kindly be acknowledged.

Sd/-

(S. JAGANNARAYANAN),

*Under Secretary to the Govt. of India.*

## APPENDIX II

[vide reply to recommendation at S. No. 20]

*Ministry of Finance Bureau of Public Enterprises O.M. No. BPE/1 (138)/Adv. Fin. 70 dated the 4th January, 1976 regarding Fixing of date of commercial production and treatment of expenses incurred during trial runs and, guarantee period performance tests:*

In any project requiring a prolonged construction period selection of a 'cut-off' date based on the date when the project is officially recognised as being ready for commercial production has to be specific. This is necessary to decide the treatment of expenses incurred during trial runs and guarantee period performances particularly in case of process industries in public sector.

2. It has been suggested that the profit or loss sustained during the trial runs and guarantee period performance tests, should not be treated as commercial profit or loss account should be prepared only from the date from which the unit is deemed to have gone into commercial production. Another view has been expressed that the date of commercial production may be linked with physical output of the plant i.e. on achieving a certain percentage of installed capacity production, say 66 2/3 per cent. or more. Yet another suggestion has been that the date of commercial production be reckoned six months from the date of the initial trial runs or on the completion of the guarantee period, whichever is earlier.

3. General principles which should assist in the determination the appropriate date when the company can be said to be ready for commercial production have been under consideration of the BPE in consultation with the CAG. It is recognised that a formula cannot be prescribed for all public enterprises. However, general guidelines for determining the date of commercial production and treatment of the expenditure during the period of trial runs and guarantee period performance tests could however be prescribed.

4. The term 'Commercial production' refers to production in commercially feasible quantities and in a commercial practicable manner.

From the moment the plant is completed and commissioned and is ready for commercial production, all expenditure of a revenue

nature must be charged to the profit and loss account. It is for this reason that is important to determine 'the cut-off date' based on the date when the plant is ready for commercial production, with precision. The crucial date will be when the plant is ready for commercial production and not the date when the plant actually commences commercial production. Therefore, if the plant has been completed and commissioned and is ready for commercial production and the company for one reason or the other, does not start commercial production immediately thereafter, the expenditure incurred during that period must be treated as revenue expenditure and may not be capitalised. This follows from an important rule both of accounting principle as well as of economic theory viz. that only those expenses should be capitalised as part of the cost of an asset which relate to the acquisition or construction of the asset or which add anything to the value or utility of the asset.

5. In case the guarantee period is very long, the date of commercial production may be reckoned on the basis of completion of the trial runs or six months whichever is earlier.

6. All expenses incurred during the period of trial runs or guarantee period performance tests may be treated as development expenditure. If it results in a profit, it may be utilised to write off the debit balance of deferred revenue expenditure, preliminary expenses, developmental expenses etc. If after writing off these intangible assets, surplus, if any, available may be credited to capital reserve account.

7. In a multi-product process plant, normally, the commercial production in the different units would start more or less simultaneously. However, sometimes this may not happen and it may then become necessary to determine the date of commercial production for each unit instead of for the entire plant for all the products. The principle as laid down in paragraphs 4-5 above can be applied in determining this date for each unit.

8. The Ministry of Industrial Development etc. are requested to bring the contents of this O.M. to the notice of the public sector enterprises under their administrative control.

Sd/- A. M. Banerji,  
Addl. Secretary & Director,  
Central Bureau of Public  
Enterprises.

### APPENDIX III

[Vide reply to recommendation at S. No. 26]

*Proforma for submission of quarterly returns showing prices at which fertilizers are being sold to farmers.*

Sl. No.	Num: of the Fertilizers* sold in black market	Prices at which these fertilizers were being sold by the dealer(s)	Name(s) of the dealer(s)	Action taken against the dealer(s)	Remarks
1	2	3	4	5	6

Note\* : Num: of only these fertilisers are to be given whose retail prices are statutorily fixed.

### PART II

Sl. No.	Name of the Fertilisers(@)	Prices at which actually sold to the farmers	Remarks
1	2	3	4

Note : @ Names of Fertilisers other than these covered by Annexure I are to be given.



# APPENDIX IV

[Vide reply to recommendation at S. No. 1]

*Production of nitrogen during the last five years*

('000 tonnes of nitrogen)

Name of the unit	Present installed capacity	Production (capacity utilisation) during				
		1970-71	1971-72	1972-73	1973-74	1974-75
I	2	3	4	5	6	7
<b>I. Old plants and those with built-in constraints</b>						
1. Sindri	90	75 (83.3)	63 (70.0)	56 (62.2)	59 (65.6)	53 (58.9)
2. Udyogamandal	82	33 (40.2)	40 (48.8)	31 (37.8)	39 (47.6)	38 (46.3)
3. Rourkela	120	24 (20.0)	47 (39.2)	49 (40.8)	46 (38.3)	61 (50.8)
4. Neyveli	70	32 (45.7)	20 (28.6)	21 (30.0)	15 (21.4)	17 (24.3)
5. Varanasi	10	6 (60.0)	6 (50.0)	5 (50.0)	6 (60.0)	5 (50.0)
6. Binnore	16	9 (56.2)	11 (68.7)	12 (75.0)	11 (68.7)	10 (62.5)
	388	179 (46.1)	186 (47.9)	174 (44.9)	176 (45.3)	184 (47.4)

# II. Stabilised plants:

7. Nangal	80	54 (67.5)	56 (70.0)	53 (66.3)	62 (77.5)	40 (50.0)
8. Trombay	81	54 (66.7)	61 (75.3)	63 (77.8)	58 (71.6)	60 (74.1)
9. Guraikpur	80	68 (85.0)	76 (95.0)	69 (86.3)	64 (80.0)	73 (91.3)
10. Namrup	45	28 (63.2)	30 (66.7)	35 (77.8)	36 (80.0)	40 (88.9)
11. Madras	164			105 (64.0)	124 (75.6)	83 (50.6)
12. Baroda (GSFC)	216	149 (69.0)	185 (85.6)	203 (94.0)	163 (75.5)	160 (74.1)
13. Vizag	80	61 (76.2)	65 (81.2)	59 (73.8)	54 (67.5)	47 (58.8)
14. Kota	152 (y)	113 (102.7)	108 (98.2)	127 (115.5)	110 (100.0)	86 (56.6)
15. Kanpur	200	107 (53.5)	128 (64.0)	156 (78.0)	115 (57.5)	192 (96.0)
16. Goa	171				(X)	135 (78.9)

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1269	634 (71.1)	709 (79.5)	870 (82.4)	786 (74.4)	916 (72.2)
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1	2	3	4	5	6	7
<b>III. New plants</b>						
Madras	164		42 (25.6)	..	..	..
Goa	171				64 (37.4)	..
Durgapur	152				6 (3.9)	15 (9.9)
Cochin	152				14 (9.2)	40 (26.3)
	304 (z)	..	42 (25.6)	..	84 (17.7)	55 (38.1)

(x) Madras unit went into production only in the latter half of 1971-72 and the unit at Goa in the latter half of 1973-74.

(y) Installed capacity at Kota during 1970-71 to 1973-74 was 110,000 tonnes; 42,000 tonnes was added in 1974-75 raising the total capacity to 152,000 tonnes.

(z) Capacity of Madras and Goa units not included as the figure in category II during the year 1972-73 onwards and in 1974-75 respectively Madras unit went into production in 1971-72 and for that year it has been treated as a new unit (in category III); similarly Goa has been shown as a new unit in 1973-74 when it went into production.

## APPENDIX V

(Vide reply to recommendation at S. No. 1)

*Total nitrogen capacity utilisation in some selected regions of the world.*

Region	Per cent capacity utilisation					
	1967	1968	1969	1970	1971	1972
India*	55	61	53	63	62	70
North America .	52	59	58	61	65	66
West Europe . . . .	68	69	68	58	56	55
East Europe & USSR	63	69	66	68	69	65
Japan .	86	93	96	62	52	43
Israel .	76	79	85	91	40	47
South Africa	33	24	38	54	53	49
Oceania .	16	20	26	43	43	59
Latin America .	57	48	46	47	50	47
Developing Africa	124	115	36	27	34	35
Developing Asia	26	40	51	50	34	43
Other Asia	48	51	54	59	69	88
World	59	63	63	60	61	60

\*Figures are on April-March basis.

*Ref: World Fertilizer Market Review and Outlook, TVA, 1974; p. 41, 43.—Source—F.A.I.*

## APPENDIX VI

(Vide reply to recommendation S. No. 1)

### MEASURES TAKEN/OR BEING TAKEN TO AUGMENT PRODUCTION IN OPERATING UNITS

(i) *At Sindri*: Installation of a supplementary naphtha gasification unit; introduction of naphtha into coke oven gas reformation section to supplement availability of gas; efforts made by Ministry of Petroleum & Chemicals to maintain the continuity of supplies of Kargali coal for improved production; a Rationalisation programme for the manufacture of phosphatic fertilizers replacing at the same time the poor quality gypsum now obtained from Rajasthan by the by-product gypsum from the phosphoric acid plant is expected to be implemented by the end of 1975-76; a long-term programme for modernisation of the Sindri plant to be implemented by April 1978 so as to replace the aged plant and process technology now in use for ammonia production by a switch-over to the use of heavy petroleum fractions as feedstock.

(ii) *At Nangal*: An expansion project is under implementation; this includes change-over from electrolysis to fuel oil as feedstock, thus reducing the power requirements to 36 MW as against the existing 164 MW.

(iii) *At Trombay*: Extensive modification to remove design and engineering deficiencies; change-over of the carbon dioxide recovery system to modified Benfield process; installation of a supplementary naphtha reformation unit; additional steps for debottlenecking the complex fertilizer plant to be implemented by the end of 1976-77.

(iv) *At Alwaye*: Installation of spare phosphoric acid reactor; installation of a thickener for gypsum slurry used for manufacture of ammonium sulphate; replacement of acid coolers, drying and absorption tower in old sulphuric acid plant and creation of additional grinding facilities for rock phosphate.

(v) *At Rourkela*:

(a) Modification for release of coke oven reformer fuel with naphtha.

- (b) Installation of a new screw compressor for the coke oven gas supply.
  - (c) Release of coke oven gas for fertilizer production by meeting energy requirements in the steel plant with fuel oil in place of coke oven gas, wherever possible.
  - (d) A proposal for the creation of additional facilities to supplement the gas availability for full utilisation of capacity has recently been approved. It will take 30—36 months for implementing the scheme after all the approvals are given.
- (vi) *At Neyveli:* The following steps have already been taken:
- (a) Installation of benzene absorbers and completion of certain other modifications in various sections of the plant.
  - (b) Implementation of a phased repair and maintenance programme on an extensive scale.
  - (c) Change-over to fresh wet-coke solution for carbon dioxide recovery.

Besides, a programme envisaging switch-over to the use of fuel oil instead of lignite as feedstock and modification in the carbon dioxide recovery system is also proposed to be undertaken. During the five months April—August 1975, the capacity utilisation in Rourkela and Neyveli has been better than in the past.

(vii) *At Durgapur and Cochin:* An end-to-end survey of Durgapur plant was carried out by Technimont of Italy. Based on their report, various modifications are to be carried out in both these plants which are presently faced with a number of problems including defective equipments supplied from abroad. Appreciable improvement in their performance can be expected only after these modifications have been carried out.

## APPENDIX VII

(Vide para 4 of Introduction)

*Analysis of action taken by Government of the recommendations contained in the Sixty-Seventh Report of the Committee on Public Undertakings (Fifth Lok Sabha)*

I. Total number of recommendations made	37
II. Recommendations that have been accepted by Government ( <i>vide</i> recommendations at S. Nos. 2, 3 and 12, 4, 5, 6, 7, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 26, 27, 28, 30, 32, 33, 34 and 37) . . . . .	25
Percentage to Total . . . . .	67.5
III. Recommendations which the Committee do not desire to pursue in view of Government's reply ( <i>vide</i> recommendations at Sl. Nos. 1, 8, 9, 10, 11, 17, 24, 25, 29, 31, 35 and 36) . . . . .	12
Percentage to total . . . . .	32.5
IV. Recommendation in respect of which replies of Government have not been accepted by the Committee . . . . .	NIL
Percentage to total . . . . .	NIL
V. Recommendations in respect of which replies of Government are awaited . . . . .	NIL
Percentage to total . . . . .	NIL