

**COMMITTEE ON PUBLIC UNDERTAKINGS
(1968-69)**

(FOURTH LOK SABHA)

FORTY-FOURTH REPORT

FERTILISERS AND CHEMICALS, TRAVANCORE LTD.

**MINISTRY OF PETROLEUM & CHEMICALS,
MINES & METALS**

(Department of Chemicals)



**LOK SABHA SECRETARIAT
NEW DELHI**

April, 1969/Chaitra, 1891 (Saka)

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C O R R I G E N D A

Forty-fourth Report of C.P.U. on F.A.C.T.

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CONTENTS

	PAGE
COMPOSITION OF THE COMMITTEE	(iii)
COMPOSITION OF THE STUDY GROUP	(v)
INTRODUCTION	(vii)
I. INTRODUCTORY	I
II. CONSTRUCTION AND COMMISSIONING—	
A. Third Stage Expansion	3
B. Fourth Stage Expansion	7
III. PRODUCTION—	
A. Shortfall in Production	11
B. Emergency Oxygen System	14
C. Idle Plant & Machinery	16
D. Cost of Production	17
IV. MARKETING—	
A. Organisation	21
B. Sundry Debtors	26
V. MATERIALS MANAGEMENT—	
A. Inventories	30
B. Finished goods	31
C. Consumption of raw materials	32
VI. ORGANISATION—	
A. Board of Directors	36
B. Personnel	37
VII. FINANCIAL MATTERS—	
A. Financial Position	41
B. Working results	42
VIII. MISCELLANEOUS—	
A. Cochin Fertiliser Project	46
B. FACT Engineering & Design Organisation	48
C. General	49
APPENDICES	
I. Steam efficiency of Gas & Ammonia Plants as worked out by Sharma Committee	51
II. Composition of the Board of Director of FACT	55
III. Summary of Conclusions /recommendations	56

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(1968-69)

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Shri M. M. Mathur—Under Secretary.

STUDY GROUP I ON CHEMICALS & PETROLEUM UNDERTAKINGS

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(1968-69)

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| Shri A. L. Rai | <i>Deputy Secretary.</i> |
| Shri M. M. Mathur | <i>Under Secretary</i> |

INTRODUCTION

I, the Chairman, Committee on Public Undertakings, having been authorised by the Committee to present the Report on their behalf, present this Forty-fourth Report on the Fertilisers and Chemicals, Travancore Ltd.

2. This Report is based on the examination of the working of the Fertilisers and Chemicals, Travancore Ltd. upto the year ending 31st March, 1968.

3. The Committee visited the projects of the Company from the 5th to 7th October, 1968. The Committee took evidence of the representatives of the Fertilisers and Chemicals, Travancore Ltd. on the 29th and 30th January, 1969 and of the Ministry of Petroleum and Chemicals and Mines and Metals (Department of Chemicals) on the 18th February, 1969.

4. The material relating to the Fertilisers and Chemicals, Travancore Ltd., was processed at various stages by the Study Group I of the Committee.

5. The Report was adopted by the Committee on the 11th April, 1969.

6. The Committee wish to express their thanks to the officers of the Ministry of Petroleum and Chemicals and Mines and Metals (Department of Chemicals) and the Fertilisers and Chemicals, Travancore Limited for placing before them most* of the material and information that they wanted in connection with their examination. They also wish to express their thanks to the non-official organisations/individuals who, on request from the Committee, furnished their views on the working of the Fertilisers and Chemicals, Travancore Ltd.

G. S. DHILLON,

Chairman,

Committee on Public Undertakings.

NEW DELHI;

April 18, 1969

Chaitra 28, 1891(S)

*See para 8.18 of the Report.

INTRODUCTORY

The Fertilisers and Chemicals, Travancore Ltd. (FACT) was incorporated on 22nd September, 1943 with the Government of the then Travancore State as a substantial shareholder. Messrs. Seshasayee Brothers (Travancore) Ltd. were appointed as Managing Agents.

1.2. The construction of the factory started at Udyogamandal on 14th August, 1944. The overall responsibility for construction and commissioning of the plant was entrusted to M/s. International Corporation of U.S.A. The plant went into commercial production on 1st August, 1948. The annual capacity of the plant was approximately 4,400 tonnes of ammonium sulphate.

Expansion Programmes.

1.3. Soon after the construction of the plant for the production of ammonium sulphate, the Company took up its first expansion programme for the manufacture of superphosphate. By September 1950, two 75-ton sulphuric acid plants and one 150-ton superphosphate plant were commissioned, the annual capacities being 40,000 tons of sulphuric acid and 44,000 tons of superphosphate.

1.4. With the advent of the First Five Year Plan and the setting up of a giant fertiliser plant at Sindri with a capacity of 3 lakh tonnes of ammonium sulphate compared to FACT's 44,000 tonnes, the Company thought of further expansion and diversification in order to survive.

1.5. The Company had embarked on a plan to manufacture caustic soda. But because of financial difficulties faced by the Company the State Government formed a new company called "The Travancore-Cochin Chemicals Ltd.", (T.C.C.) with FACT carrying as equity Rs. 25 lakhs which it had spent on this project.

1.6. When the T.C.C. went into production it generated large quantities of hydrochloric acid as by-product. FACT decided to put up an Ammonium Chloride Plant to absorb this by-product. At that time ammonium chloride was not being produced in the country. This plant was commissioned on 4th June, 1955, with an annual capacity of 8,000 tonnes.

Second stage expansion.

1.7. A Committee appointed by the Board of Directors suggested further expansion of the Company in two stages. The first stage of expansion involving an outlay of Rs. 3 crores contemplated the doubling of nitrogen capacity and the introduction of a new compound fertiliser called ammonium phosphate (16:20 grade). An electrolytic hydrogen plant to supply enough hydrogen to make 40 tons of ammonia a day was also set up as part of this programme. This plant which required 21,000 KWY of electric power, however, turned out to be a white elephant later and five, out of its 8 cells, were sold to Nangal Fertiliser Factory in November, 1965. The second stage of expansion costing Rs. 2 crore aimed at replacing the unique but uneconomic firewood process with the modern oil-gasification process and increasing nitrogen capacity to 30,000 tons per annum. This expansion was completed in December, 1962.

1.8. In the meantime on 15th August, 1960 the Managing Agency agreement expired in accordance with the Indian Companies Act and the Government of Kerala, the major shareholder, took over the responsibility for the management of the Company through a Board of Directors. Soon afterwards, a substantial expansion programme was drawn up involving a capital outlay of Rs. 12 crores in order to raise the capacity to 70,000 tonnes of nitrogen and 33,500 tonnes of P_2O_5 .

1.9. In July, 1963, the Central Government acquired majority of shares of the Company. Three considerations were stated to have influenced the Central Government to take this decision. The first was that the Government had stood as a guarantor for the loan of Rs. 3 crores granted to FACT for its Second Stage Expansion by the I.F.C. Secondly, the Central Government had approved the Third Stage Expansion at a cost of about Rs. 12 crores. The Company was in difficulties about financing this expansion and a request was made to the Central Government both by Kerala State Government and the Company for financial assistance. Thirdly, there was a general consideration that large factories for the production of nitrogenous fertilizers should preferably be under the control of the Central Government.

1.10. The Central Government since acquiring the majority shares in July, 1963 manages the Company.

1.11. For the purpose of this Report the Committee have examined the working of this Company only after it became a Central Government undertaking.

CONSTRUCTION AND COMMISSIONING

A. Third Stage Expansion

Soon after the Government of Kerala took over the responsibility of managing the Company on the expiry of the Managing Agency Agreement on the 15th August, 1960, the Company took up a substantial expansion programme involving an outlay of Rs. 12 crores. This expansion called the Third Stage Expansion involved the installation of:

- (i) An Oil Gasification plant to give enough hydrogen to produce 140-MT/day of ammonia.
- (ii) A Tonnage Oxygen plant producing enough nitrogen to produce 140-MT/day of ammonia.
- (iii) A 450-MT/day Sulphuric Acid Plant.
- (iv) A 300-MT/day Ammonium Sulphate Plant based on by-product gypsum.
- (v) A 300-MT/day Ammonium, Phosphate Plant.
- (vi) A 100-MT/day P_2O_5 Phosphoric Acid Plant.

2.2. The Third Stage Expansion aimed at raising the capacity of the plant to 70,000 tonnes of fixed nitrogen and 33,000 tonnes of P, O, the end products being:—

Ammonium Sulphate	200,000 tonnes
Ammonium Phosphate (16:20)	135,000 tonnes
Super Phosphate	44,000 tonnes
Ammonium Chloride	25,000 tonnes
NPK Mixtures	350,000 tonnes

2.3. The Government of India sanctioned the Third Stage Expansion in January, 1962. The import licences for all the main plants were received by 30th August, 1962. In the normal course the Third Stage Expansion Scheme should have been completed in 30 months after receipt of import

licenses *i.e.* by the 1st quarter of 1965. Although the erection of the plants had progressed according to schedule the plants went into commercial production only in October, 1966 *i.e.* after a delay of about 1½ years.

2.4. The Committee enquired into the reasons for the delay in the commissioning of these plants. They were informed that the Kerala State Electricity Board imposed a severe power cut with effect from 1st April to 26th June, 1964. Again there were drastic power cuts commencing from 15th March, 1965 to 31st July, 1965 and from 17th November, 1965 to 18th June, 1966. During these periods it became impossible to work even the existing plants. From February to April, 1966, the cut was 100 per cent. There was thus no possibility of any power being made available for commissioning the newly constructed plants till late 1966.

2.5. The main power project based on which the Third Stage Expansion was expected to be commissioned was the Sholayar Project. The Kerala State Electricity Board continued to postpone the commissioning of this project from July/August, 1964 to October, 1965 and later on to July, 1966. Even in July, 1966 this project was not ready. Power was drawn for trial runs and commissioning of the Third Stage Plants from the Sabarigiri Project, in which one set of generators had started working.

2.6. The delay in commissioning of the plants resulted in a loss of production worth about Rs. 6 crores. Interest payment also increased on account of this delay by Rs. 83 lakhs.

2.7. The Committee enquired whether before taking up the expansion programme FACT satisfied itself that the Kerala State Electricity Board would be able to supply the required power. They were informed that in June, 1961, FACT had written to the Kerala State Electricity Board (KSEB) and the State Government indicating that in the Third Five Year Plan it proposed to raise nitrogen capacity from 32,500 to 70,000 tons per year and that tentative additional power requirements would be 17,000 KW. This was to be phased as follows:—

From April, 1964	+1500 KW.
From August, 1964	+3000 KW
From December, 1964	+12,500 KW
	<hr/>
	+17,000 KW
	<hr/>

2.8. In August, 1961 KSEB indicated that they expected their Sholayar and Sabarigiri (2 units) Projects to go into operation by the end of

1964 and that they would be able to meet the above requirements. The Kerala Government also wrote to FACT that the tariff for the above would be Rs. 145 per KW and Rs. 155 per KW per year for 10 years for power taken at 110 KW and 66 KW respectively.

2.9. In June 1962 FACT again wrote to KSEB informing that it had signed agreements for supply of plant etc., for the Third Stage Expansion and that the requirements of additional power would be 19,000 KW scheduled as follows:—

From July/August, 1964	+2,500 KW
From November/December, 1964	+11,000 KW
From 1st quarter of 1965.	+5,500 KW
	<hr/>
	+19,000 KW
	<hr/>

2.10. In September, 1962. KSEB wrote that it would not be possible to give the additional power from July/August, 1964 as their Sholayar Project would generate only from the end of 1964, but that it should be possible to give the additional power from the end of 1964 "subject to the condition that Sholayar station was commissioned by that time."

2.11. In June, 1965, the schedule of drawal of additional power was revised to begin from August, 1965, full requirement being drawn from October, 1965. KSEB then replied that as the Sholayar Project was delayed it would be impossible to keep to this schedule and that they would be able to meet FACT's requirements only after July, 1966. FACT suggested in August, 1965 that in order to prove the new plants and to do the test runs guaranteed, it would need an additional 5,000 KW immediately. KSEB replied that due to shortage of water storage in the reservoirs feeding the hydel stations, even this would not be possible.

2.12. The Committee were also informed that when the Kerala power projects were delayed and the situation worsened in 1962 an assessment was made whether it would be worthwhile to set up FACT's own power station. The setting up of a power plant would have taken at least 30 to 36 months. Further, with the Third Stage Expansion under implementation, power requirements were estimated at 50,000 KW. To put up a thermal plant capable of producing 50 MW of power, the cost estimated at that time was about Rs. 12 crores. The cost of generation of electric power from that plant was also assessed at between 11 and 12 paise per unit as against a cost of less than 2 paise per unit from the Kerala power grid. It was not possible for FACT to consider the installation of such a plant not only because of the heavy investment involved but also due to heavy cost of power generation. Power at 11 to 12 paise per unit would not have given any advantage to it. It was, therefore, considered best to get power from the Kerala hydro-electric grid.

2.13. The Committee were, however, informed by the Managing Director, during evidence that in order to help the Kerala State Electricity grid to stabilise itself it was proposed by FACT that a 100-MW thermal station should be set up at Cochin. This proposal was moved about eight years ago. But neither the State Government nor the Central Government took up this matter seriously. On account of constant representations from the industry, the Government of India ultimately agreed to sanction a 55-MW thermal station. It was hoped that the State Government would take advantage of the sanction and proceed with the work. On the request of the State Government, FACT had also earmarked about 50 acres of land at Cochin for such a station. But no further progress had been made since then. The industries in the region were constantly reminding the State Government and the KSEB of the need for this station.

2.14. The Secretary of the Ministry of Petroleum & Chemicals also stated, during evidence, before the Committee that the Central Government had strongly pressed for a thermal power station. The Ministry were even prepared to make petroleum fuel available for setting up this plant from the Cochin Refineries.

2.15. On the other hand it is noticed that when the Committee on Public Undertakings examined in 1965 the working of the state owned Public Undertakings in Kerala, the Chief Secretary of the State Government stated in his evidence before the Committee that the minimum requirement of the State was a 100-MW thermal plant and if this was not installed it might create serious difficulties as were being experienced at present when the monsoon failed.

2.16. The Committee were also then informed that the State Government had prepared a scheme for the installation of a 100-MW thermal power station in the Cochin area using furnace oil available from the Cochin Refinery. A technical Committee of the Planning Commission and the Central Water and Power Commission of the Government of India examined this proposal and rejected it. KSEB had by then prepared another proposal for the establishment of a 30-MW station initially followed by a 50-MW station later. The scheme had been sent to the Government of India for approval. (Para 44 of 27th Report of Committee on Public Undertakings).

2.17. The Committee are not happy over this state of affairs. It is strange that while earlier the State Government was anxious to have a 100-MW thermal power station, the scheme was not approved by the Central Government. Now that the Central Government has approved the installation of a 55-MW thermal power station, the State Government does not appear to be keen to set it up. The result is that the absence of steady power supply has greatly affected the industries in the region including FACT. The Committee therefore desire that the Central Government

should actively pursue the question of early installation of a thermal power station with the State Government. The Committee hope that the State Government would take necessary steps to set up the thermal power plant even at this belated stage so that the Cochin based industries do not have to depend on the vagaries of nature.

2.18. The Committee also feel that the Third Stage Expansion was ill-timed. FACT depended solely on the indication given by the Kerala State Electricity Board in August 1961, that they would be able to meet the requirements of power for the Third Stage Expansion without binding KSEB through an agreement for the supply of required power. But by 1962 the possibility of supply of additional power had become doubtful and KSEB informed FACT that they would not be in a position to give additional power from July/August 1964 as desired by it. The supply of additional power even by the end of 1964 was subject to the condition that Sholayar Station was commissioned by that time". Considering that the Kerala State Electricity Board had not been able to meet the Company's requirements of power ever since the First Stage Expansion and that in 1962-63 itself FACT had suffered a loss in production worth Rs. 2.5 crores due to power cuts, the Committee feel that it should have examined carefully whether it was desirable to proceed further with its expansion programme unless there was assured power supply. Nor do the Central Government appear to have given proper consideration to this aspect before advancing money for the Third Stage Expansion. Had this been done FACT would not have faced the problem of keeping the plant and Machinery, erected under the Third Stage Expansion, idle for about 1½ years resulting in unnecessary locking up of a capital of Rs. 12 crores besides additional expenditure on staff, interest charges, etc.

2.19. The Committee have pointed out other instances also where the projects in the first instance or after expansion could not be commissioned due to lack of power supply. The Committee suggest 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.

B. Fourth Stage Expansion

2.20. Soon after the completion of the Third Stage Expansion, FACT took up a further expansion called the Fourth Stage Expansion. As to the justification for having further expansion, the Committee were informed that the electrolytic hydrogen plant erected by it under the Second Stage Expansion contributed only towards 1/7th of the ammonit production but consumed over 21,000 KW of power. Because of difficulties of power it was considered advantageous to replace as many of its units as possible. The Nangal Fertilizers factory of FCI was finding it difficult to maintain full production as it did not have an adequate

maintenance reserve. Five out of the eight cells were therefore dismantled and transferred to the Nangal Unit in November, 1965. The power requirements were thus reduced from 50,000 to 32,000 KW. But this also meant a reduction in the capacity to produce hydrogen. This had to be rectified.

2.21. Further, FACT had some phosphoric acid to spare. The original intention was to use it for detergents as advised by DGTD; but later detergents were based on other material. The surplus phosphoric acid capacity therefore could be used for conversion into additional ammonium phosphate. The ammonium phosphate under manufacture at that time was 16:20 grade. The market trends were for more and more high grade fertilisers. Ammonium phosphate 20:20 grade was quite a well known fertiliser. It was, therefore, decided by FACT to have further expansion of the plant which was more or less a rationalisation programme. This involved the installation of a 120 tonnes a day ammonia plant based on naphtha and a 150 tonnes a day 20:20 grade ammonium phosphate plant. It also involved the upgrading of the existing 16.20 grade ammonium phosphate to 20:20.

2.22. The main features of the Fourth Stage Expansion project are :—

- (i) Reduction of power requirements from 50,000 KWY to 32,000 KWY.
- (ii) Ammonia capacity will be raised from 235 MT/day to 340 MT/day, reducing cost of production.
- (iii) Ammonium phosphate quality will be improved from 16:20 to 20:20.
- (iv) Annual N capacity will go up from 70,000 MT to 90,000 MT and P₂O₅ capacity from 33,500 MT to 40,000 MT.
- (v) Annual turnover is expected to go up from Rs. 181.6 million to Rs. 213.2 million.

2.23. This programme involved a total investment of Rs. 5 crores. It was expected to go into production by the end of 1969.

2.24. The Committee enquired whether the progress of the expansion programme was according to schedule. They were informed by FACT that there were some delays at present due to the following factors :

- (i) Time taken to get clearances from the DGTD for certain critical items like boilers and instruments. Although the application was made in February, 1967, clearances could be obtained only in December, 1967 and January, 1968.

- (ii) For an order placed for stainless steel plates and tubes with an Indian firm on 19-12-1967 the import licence is yet to be issued to the party by the State Trading Corporation.
- (iii) Foreign exchange to the tune of Rs. 25·04 lakhs required for imports is still to be released by the Government of India. The requirement was indicated as early as 9-11-1966. The present position is that the Government have indicated that the amount is too small to be included in the Yen credit. Request had since been made to release it either from the UK credit or from free resources.

2.25. The Committee were, however, informed during evidence by the Secretary of the Ministry that the delay in giving clearance by the DGTD was due to the fact that the items which FACT wanted to import were those which were manufactured in the country. FACT did not make enquiries from the Indian fabricators before approaching the DGTD for clearance. The DGTD, therefore, wanted to be satisfied that the Indian fabricators could not meet the requirements.

2.26. The Committee regret to note that the prescribed procedure of approaching the local manufacturers first was not followed by FACT before asking the DGTD for clearance which resulted in avoidable delay in the issue of an import licence.

2.27. As regards delay in issue of import licence for stainless steel plates and tubes by the STC., it was explained that the STC had a trade agreement with Sweden for the import of materials on barter basis. The STC took time in arranging the supply on barter basis. This had, however, since been finalised.

2.28. Explaining the reasons for the delay in releasing foreign exchange of Rs. 25·04 lakhs the Secretary of the Ministry stated that FACT originally wanted to procure these items from Japan and had asked Government to supply 'Yen' credit for the purpose. But this was not found practicable. It was therefore suggested that the equipment should be obtained from either U.S.A., or a British source. The Government had now actually allocated British credit for this procurement. But as FACT had not yet obtained the DGTD's clearance for imports, the actual orders had not been placed. He admitted that the case could have been handled more expeditiously and the delay of two years was a serious concern.

2.29. The Committee are concerned over the inordinate delays in this case. Not only there was delay on the part of the State Trading Corporation to issue import licence for steel plates and tubes, but it had also taken the Government more than two years to release foreign exchange of
168 L.S.—2.

Rs. 25·04 lakhs required for import of instruments, boilers etc. This would not only result in loss of production due to delay in commissioning of the plant but also avoidable drain on foreign exchange for importing the required fertilisers to meet the shortage. It was admitted by the Secretary of the Ministry during evidence that the case could have been handled more expeditiously on the whole and the delay of two years was a matter for serious concern. There had also been some 'slippage' in so far as clearance from the indigenous angle was concerned with the result that even though the British credit had been allocated for the import, the actual orders had not been placed. The Committee desire that the matter should be looked into and action taken against the delinquent officials.

2.30. It appears that the procedure for release of foreign exchange also requires to be streamlined. The request for foreign exchange should be balanced with the cost of imports needed to make good the loss of indigenous production resulting from non-commissioning of plant for want of some imported equipment. Such cases should therefore get top priority. The possibility of making even free foreign exchange available to the public undertakings for a fixed period should also be considered to avoid such delays.

III

PRODUCTION

A. Shortfall in production

3.1. The present daily design capacities of various plants after the Third Stage Expansion as well as their annual capacities based on a stream factor of 330 days are shown below :

	Daily design capacity (tonnes)	Annual design capacity (tonnes)
Ammonia plant	235	77,550
Ammonium Sulphate Plant } Gypsum -330 } Neutralisation-225 } SO ₂ recovery-45 }	600	193,000
Ammonium phosphate (16:20)	400	132,000
Sulphuric acid	746	246,180
Ammonium chloride	75	24,750
Superphosphate	135	44,550
Phosphoric acid (as P ₂ O ₅)	125	41,250

3.2. The actual production of these plants has however been much lower than the design capacity. Although the plants erected under the Third Stage Expansion programme were completed in 1965, these could not be commissioned for a long time due to severe power shortage. In fact even the plants erected under the Second Stage Expansion also worked much below the rated capacity due to power shortage, power interruptions, etc. After full power supply was resumed in June, 1966, the trial runs of the plants erected under the Third Stage Expansion were undertaken. The plants were commercially commissioned as from 15th October, 1966. Thus these plants worked for full year only during 1967-68. This was also the

year when there was no power cut. But even then the actual production during 1967-68 was as follows:—

Name of Product	Annual design capacity	Targets of production Initial estimate	Revised estimate I	Revised estimate II	Actual production
1. Ammonia	77,550	70,000	60,359	45,000	44,210
2. Sulphuric acid	246,180	185,000	169,910	125,000	120,117
3. Ammonium sulphate	198,000	150,000	118,048	77,000	77,699
4. Ammonium phosphate	132,000	90,000	97,082	54,500	55,881
5. Ammonium chloride	24,150	12,000	11,015	5,650	5,602
6. Superphosphate	44,550	40,000	47,068	42,000	42,196

3.3. The Committee enquired the reasons for the production at the plants being not only lower than the rated capacity but also lower than the original and revised targets fixed by FACT. They were informed that during the year there were 112 power interruptions/voltage drops. There was also sulphur shortage till July, 1967. These together with the teething troubles of the new plants accounted for a loss of production of Rs. 500 lakhs.

3.4. As regards the difficulties in solving the problem of power interruptions, which according to FACT had existed since 1962-63, the Committee were informed during evidence that the power generation was at a central place and from there it was conveyed by high tension transmission to the sub-station. From the sub-station it was again transmitted to the various plants. In the sub-station the equipment required were capacitors, potential transformers, current transformers and relays etc. Adequate quantity of these equipments, trained men and control on the basis of modern electricity transmission methods must be there to control the power interruptions, etc. The seriousness of the situation was brought to the notice of the Government of Kerala in 1966-67. During the last one year some work had been done to improve matters. The State Government appointed a one man commission at the instance of FACT to go into this question. Seeing that the recommendations of

this Commission were not being implemented expeditiously, the matter was taken up at the Ministry's level and it led to the appointment of a committee consisting of the representatives from KSEB and major consumers like FACT and Cochin Refineries, who were to review the implementation of these recommendations. As a result of this committee's work there had been a noticeable improvement since July, 1968. There was better regulation at the sub-station and the frequency of power interruptions was reduced. But the problem was not fully solved as the main transmission station at Kalamassery had not been equipped adequately to meet the requirements. Most of the equipments required for this sub-station took two to three years for procurement, whether they were to be obtained from abroad or in India.

3.5. The Committee are concerned over the loss of production due to power interruptions. The fact that the steps taken during the last one year have resulted in reducing the power interruptions prove that the difficulties in solving this problem are not insurmountable. It however, appears that earlier neither the State Government realised the seriousness of the situation nor was the matter actively pursued with them either by FACT or the Central Government. Had this been done, the Committee see no reason why it should not have been possible to solve this problem of power interruptions.

3.6. While the power interruptions did affect the production of the plant, it does not explain fully the shortfall in production. The Ministry of Petroleum and Chemicals appointed a study group in January 1968 (called Sharma Committee) to look into the working of FACT with a view to locate the reasons for shortfall in production and suggest measures for improving the out put and efficiencies. The study group submitted its Report in April, 1968.

3.7. In its report, the Sharma Committee pointed out that the present daily design capacities of various plants as well as their annual capacities were based on a stream factor of 330 days. On the basis of experience related by the production and maintenance staff of the gasification and ammonia plants a test check was made to see if it was realistic to obtain an assumed stream efficiency of 330 days for these two basic plants on which the production of the entire factory depended. The Sharma Committee came to the conclusion that taking into consideration the anticipated losses in production due to power interruptions, and the jobs of regular nature, the probable stream efficiency which could be achieved at present was 294 days which would be equivalent to about 69,000 tonnes of ammonia per year. The efficiency could be improved to 317 days per year after certain modifications proposed in the report were carried out. This would bring the annual production capacity to about 74,500 tonnes. Calculations indicating how these efficiencies had been derived at by the Sharma Committee are given in Annexure I.

3.8. The Committee enquired the reasons for the actual production of ammonia in 1967-68 being only 44,210 tonnes as against 69,000 tonnes estimated by the Sharma Committee under the present circumstances. They were informed during evidence by the Managing Director as follows :

“You cannot achieve it if you don't have steady power supply. If you have 112 or 120 interruptions you lose 60 days' production. At this rate, you will never be able to achieve it; the total production will only be 230 days production. We have 235 tonnes a day capacity for the ammonia plant.

You may attain this under perfect conditions, but not with these interruptions. The plant is designed to attain that and the annual production is worked out on the basis of stream days— 235×294 ; that is how 69,000 tonnes had been arrived at. But, our plant works only for 230 days or 225 days. This is the difference.”

“Based on the experience available at the time of preparing the report they (Sharma Committee) presumed that the total loss of production on account of power interruptions would be only 16 days. But our experience shows that the total loss of production on account of that was about 65 days in 1967-68”.

3.9. In the face of the findings of an expert committee (Sharma Committee) which also included an officer of FACT, and which submitted its report when actuals for 11 months for the year 1967-68 were available, the Committee find it difficult to accept the contention of the Management that the loss of production in ammonia plant due to power interruptions was to the extent of 65 days production as against 16 days assessed by the Sharma Committee. The Committee have not been informed of any fresh facts which have come to the notice of the Management on the basis of which it had come to a different conclusion than that reached by the Sharma Committee. As pointed out by the Committee in subsequent paras of this Report there were several operational deficiencies like high consumption of raw materials, large down-time of plant and machinery, absence of proper co-ordinated maintenance of all the plants, etc. which affected production in the plant. The Committee, therefore, desire that instead of explaining away the shortfall in production in reference to power interruptions alone, proper remedial measures should be taken by the Management to improve production and achieve the rated capacity.

B. Emergency Oxygen System

3.10. Even with regard to power interruptions the Sharma Committee pointed out that the frequency of shut downs due to power interruptions

could be brought down in the gas and ammonia plants if the emergency liquid oxygen system was commissioned and turbo-alternator set for emergency power was kept in continuous operation. However, liquid oxygen storage and its distribution system were not working at all and were responsible for frequent stoppages of the gasification plant on account of oxygen shortage during power interruptions. The Sharma Committee recommended that as power interruptions/fluctuations were of frequent occurrence, proper operation of this system would reduce the down time considerably.

3.11. The Committee asked the reasons for not keeping the emergency oxygen system in proper order. They were informed that this equipment was the first of its kind designed by the manufacturers for providing supply of oxygen in an emergency. The system was a complicated one involving the use of a high speed pump for the evaporation of liquid oxygen. When it was put into operation it was seen that this pump could not meet shut-downs of the frequency faced at that time. Even when the plant was going through commissioning, this pump went out of order. This was early in 1966.

3.12. The inadequacy of the pump was referred to the manufacturers who prepared alternate designs. Finally they recommended a suitable alternate design, making use of a low pump rather than the fast one originally proposed. After their recommendations were received, FACT moved the DGTD in June, 1968, for an import licence for the modifications. On pursuing the matter, the DGTD gave clearance stating that they had no objection to the import of the pump if the motors, which are an integral part of the pump, were purchased indigenously. The foreign suppliers on the other hand indicated that the pumps without motors would not be tested by them before despatch and that they could not accept technical responsibility. The matter had now been taken up with the Ministry of Petroleum and Chemicals so that it could be settled at the Ministry's level.

3.13. The Committee are not satisfied with this explanation. They find that the oxygen pump went out of order in early 1966. Considering the large number of power interruptions which greatly affected production, it was expected of the Management to take immediate steps to bring the plant into working order. It, however, appears that steps were taken in this regard only after the Sharma Committee had pointed out the imperative need for it. The failure to keep the oxygen pump working during these years has resulted in considerable loss of production. The Committee trust that steps would now be taken to commission this plant and keep it in working order.

C. Idle Plant and Machinery

3.14. Another factor which has affected production is high percentage of idle plant and machinery. According to the Sharma Committee the probable stream efficiency which could be achieved at present was 294 days *i.e.* 7056 hours. The Committee were, however, informed that the machine hours available in each plant during 1967-68, after deducting the hours lost due to the prime causes such as power cuts, power interruptions, salinity, raw material shortage and labour unrest etc. were only 6104.

3.15. It is significant to note that even after deducting the hours lost due to these prime causes, the number of hours for which various plants worked during 1967-68 was much less than the machine hours available as shown below:

	Available Machine Hrs.	Utilised Machine Hrs.	Idle Machine Hrs.
Ammonium Chloride	6104	2604	3500
Phosphate	6104	2304	3800
Phosphoric Acid	6104	3304	2800
Sulphuric Acid	6104	2504	3600
Sulphate	6104	5864	240
Ammonia	6104	3404	2700
Tinnox	6104	5144	950
Oil Gification	6104	3812	2292
Electrolytic Plant	6104	5144	950
Fine Chemicals	6104	4924	1200

3.16. It would be seen from the above statement that some of the plants remained idle for more than 50 per cent of the available machine hours in 1967-68 even after excluding hours lost due to prime causes. It was also noticed that the shut down of the plants for preventive maintenance was for 2205 hours only while the plants were shut down for 19847 hours in 1967-68 due to unexpected break down and accidents as against 10952 hours in 1966-67.

3.17. The Committee were informed that the shutdowns were not due to defects in design or due to use of sub-standard materials. The reasons for major breakdowns being higher could only be successive shocks taken by units during power interruptions.

3.18. It is conceded that the power interruptions cause some damage to the plant. But it is difficult to agree that they caused shutdowns to the extent of 19847 hours in 1967-68. The Committee were assured that the shut downs were not due to defects in design or use of sub-standard material for the plant. In that case the Committee feel that the break-downs could have been avoided to a large extent by proper maintenance of the plant. As pointed out by the two technical committees, there were deficiencies in the maintenance of the plants. FACT's Auditors have also pointed out that the general maintenance of the machinery had not been up to the mark and that it needed closer attention to avoid frequent break downs. The Committee expect that in future proper attention will be paid by the Management for maintenance of the Plant.

3.19. The Committee were informed that on the suggestion of the Sharma Committee certain reorganisation had been done. Maintenance was brought under a Chief Mechanical Engineer. One post of Superintendent, Preventive Maintenance was created to look after the maintenance as well as lubrication, inventory control, fixing levels of common spares, etc. Action was also being taken to provide additional personnel in the Mechanical Maintenance Department based on the study conducted by the Industrial Engineering Department.

3.20. The Committee trust that with the reorganisation of the maintenance department, greater attention will be paid to maintenance. It needs no emphasis that continuous production depends to a large extent on the attention paid to the maintenance of equipment according to a properly planned and co-ordinated schedule. The Committee expect that this aspect will be given its due weight by the Management in future.

D. Cost of Production

3.21. The following table shows the Details Project Report estimates, standard cost fixed by the Management, actual cost of production and the selling price for various products during 1966-67 and 1967-68 :—

	1966-67				1967-68		
	DPR Estimate R.	Standard cost Rs.	Actual cost Rs.	Selling price Rs.	Standard cost Rs.	Actual cost Rs.	Selling price Rs.
1. Ammonium sulphate	255.85	214.32	410.05	368.38	311.58	493.00	439.30
2. Ammonium phosphate	416.52	386.34	608.71	680.78	544.83	761.64	789.78
3. Super phosphate	174.75	201.20	249.23	267.89	268.41	291.97	358.66
4. Ammonium chloride	350.68	243.28	646.21	566.49	345.33	590.70	756.05

3.22. The Committee enquired the reasons for the cost of production being higher than the DPR estimates, standard cost and in some cases even higher than the selling price. They were informed that the DPR estimates were only from the Second Stage Expansion. When the Third Stage plants were commissioned, they had to prescribe certain guidelines to control production cost in the plants. Therefore the standard cost was fixed in 1966. As there were no attainable figures at that time they took up the design figures as standard cost. The actual cost of production had always been higher than the cost originally indicated as the latter was worked out on the basis of optimum production while the actual production was only 50 per cent to 60 per cent of the rated capacity. The fixed charges had to be distributed over the quantity produced resulting in higher cost of production.

3.23. As regards the cost of production being even higher than the selling price it was stated that the selling price had to be fixed according to the market conditions. In the case of ammonium chloride, the selling price could not be raised because the competition with imported ammonium chloride was such that if they had raised the price it would have been difficult to make sales. During 1967-68 they had been able to establish cost of production for ammonium chloride lower than the selling price.

3.24. As for the ammonium sulphate, it was explained that at present the Government were importing large quantities of fertilisers in the form of ammonium sulphate, di-ammonium phosphate and urea. In fixing the maximum retail price for the imported fertilisers, the Government normally took into account the landed cost and added a certain freight element for equalisation. But there was a certain element of dumping in regard to imported fertilizers. These fertilizers were being imported into the country at a much lesser price than the price charged in their own countries. The matter had been taken up with the Ministry of Petroleum and Chemicals and the Ministry of Food and Agriculture requesting them that the price of the imported fertilisers should be fixed on a realistic basis taking into consideration the cost of production of indigenous manufacturers.

3.25. The Managing Director however, admitted during evidence that at present there was no control over the prices and there were two prices operating for ammonium sulphate. The consumers who got imported stock got it at the price fixed by the Government. On the other hand, the agents for manufacturers were selling it at the price fixed by the manufacturers.

3.26. The Committee noticed that one of the reasons for high cost of production was heavy incidence of factory over-heads and administrative expenses. For instance, during the quarter October-December, 1968, the proportionate production for all the products was generally higher than

the revised budget estimates. In the case of ammonium sulphate it was even higher than the original estimates. But even then, the factory overheads and administrative expenses were much higher as compared to the standard cost fixed by the Management itself for the year 1968-69.

3.27. **The Committee view with concern the high cost of production at FACT. As pointed out in para above one of the reasons for high cost of production is the heavy incidence of factory overheads and administrative expenses which are much higher than the standard cost fixed by the Management. The Committee feel that there is an imperative need for analysing the reasons for high cost of production and for taking effective steps to bring it down.**

3.28. **The Committee also feel that if the standard costs fixed by FACT are to serve any purpose, the reasons for variation between the actual cost of production and the standard cost fixed for each item should be reviewed periodically with a view to locating the causes therefor and to take prompt remedial measures."**

3.29. In this connection the Committee enquired as to how did the cost of production of various products of FACT compare with the cost of similar products at other factories in public sector. The Managing Director stated during evidence that the Fertiliser Corporation of India had published the figures only in terms of the total cost and not for individual plants separately.

3.30. Asked whether there was no machinery for the exchange of know-how between similar public undertakings on various aspects like selling prices, cost of production, etc., the Managing Director stated that there was no such machinery. He also pointed out that within the same station like Bangalore or Cochin, there were a number of units coming under four or five Administrative Ministries. Very often the directions received from the Ministry in regard to the same problem differed. Therefore, a suggestion was made that there should be a sort of standing conference for senior men of the public undertakings to get together and exchange ideas on various aspects such as personnel, industrial relations, production, costs, maintenance problems, etc. This was, however, not agreed to by the Government.

3.31. The Committee were, however, informed by the Secretary of the Ministry during evidence that they had provided for common directors between FACT and F.C.I. The Managing Director of FACT was a member of the Board of F.C.I.* The Chairman of F.C.I. was also a member of the Board of FACT. He, therefore, thought that there was no difficulty in exchange of information. As a Director of F.C.I. for so many years, the

*At the time of factual verification the Committee were informed that the Managing Director of FACT was a Director on the Board of F.C.I. until 1963. The Chairman of the F.C.I., however, continues to be on the Board of FACT.

Managing Director, FACT, was entitled to ask for the required information. The industry itself organised a large number of study groups, seminars for study of marketing, production problems and labour relations. Further, the Ministry had its own organisation for collecting information on problems of production, maintenance, agronomy, labour relations. The Ministry had a fertiliser project unit. It was in receipt of information from all the public sector enterprises through monthly reports, etc.

3.32. The Committee were also informed that in certain places, like Bangalore and Cochin,* where there were a large number of public enterprises, local committees of the public undertakings had been set up for the purpose of coordination and co-relation in respect of labour matters and other problems of administration.

3.33. The Committee feel that it would be useful for a public undertaking to have comparative figures from other undertakings in the same industry about various aspects of their working like consumption of raw materials, cost of production, overhead expenses, marketing expenditure, etc. This would enable them to make a comparative study and to take proper remedial measures in cases where any deficiencies were noticed. As stated by the Secretary of the Ministry, during evidence before the Committee, there should be no difficulty in a public undertaking getting such information from another sister concern. If need be, the administrative Ministry concerned, could be approached for this purpose.

3.34. The Committee also feel that the project units in the administrative Ministries should make comparative studies of important aspects of the working of different units in the public sector in the same industry to locate areas of weaknesses. These could then be brought to the notice of the undertakings concerned for corrective action.

*At the time of factual verification FACT informed the Committee that there was no such Committee in Cochin.

IV

MARKETING

A. Organisation

4.1. FACT has set up a separate Division for looking after the marketing of its products. The Marketing Manager is the head of the Marketing Division.

4.2. There are two departments for handling the sales viz. the Sales Department (Chemicals) and the Fertilizer Department.

4.3. The Sales Department (Chemicals) deals with marketing of such chemical products as anhydrous ammonia, sulphur dioxide, ammonium chloride, sulphuric acid, sodium fluoride etc. There is a Sales Manager incharge of chemicals department who is assisted by a Sales Officer and the required office staff.

4.4. Ammonium chloride distribution is handled by a number of agents appointed for the purpose in all important towns of the country. FACT has agents for sale of sulphuric acid in Kerala, Madras, Mysore and Andhra Pradesh through whom orders are routed. Anhydrous ammonia is supplied direct to bulk consuming industries; small users are supplied through a few major dealers, who have distribution points in all major cities. Other chemical products are supplied to the consuming industries direct.

4.5. In order to look after the sales activity in respect of chemicals in the important sectors, FACT has a regional Sales Manager stationed in Delhi to cover the whole of North India. A Sales Officer in Bombay coordinates with Fertiliser Corporation of India in distribution of ammonia supplied by them as also to supervise chemical sales in Bombay. A Sales Officer in the Madras Area Office looks after chemical sales in the Madras City.

Fertiliser Department:

4.6. The sale of fertilisers is the major task of the Marketing organisation. For fertilisers, FACT has a fairly decentralised organisation. At the Head Office under a joint Marketing Manager, bulk sales to the fertiliser mixing units, industrial consumers and plantations are organised.

For purposes of administration, FACT's marketing area,—the four Southern States—is divided into areas, each under an Area Manager, an area being generally a State. Each area is divided into regions with Regional offices headed by Regional Managers, who control the sales activities in the districts allocated to their charge. They are further assisted by Sales Officers, Marketing Officers, etc. Agronomy Services including soil testing are rendered by Agronomists attached to each Area functioning under the technical guidance of the Chief Agronomist in the Head Office.

4.7. For distribution of fertilisers FACT has its own Central Depots as well the Depots managed by private parties. In Kerala, barring the 13 Central Depots still left in the hands of private agents, FACT runs the remaining 45 Central Depots direct. In Madras, Mysore and Andhra Pradesh distribution is mostly done through wholesale agents. The number of Central Depots managed by it is 23 in Madras and 13 in Andhra State. It has been stated that these are to provide to the farmers a model for prices, quality, etc. Godowns for keeping buffer stocks are maintained at strategic points.

4.8. FACT has also taken several steps for sales promotion. These include :

- (a) Demonstration plots for various types of soils;
- (b) Seminars and study classes;
- (c) Propaganda through films;
- (d) Planned advertisement campaign;
- (e) Fairs and Exhibitions on a wide scale;
- (f) Fertiliser festivals;
- (g) Soil testing facilities;
- (h) Wide marketing net work so that a farmer does not have to go more than four Kms;
- (i) After-sales service through agronomists and field officers;
- (j) Direct mail contacts; and
- (k) A regular follow-up.

FACT Marketing Division has thus been developed to function as a Sales-cum-service organisation.

4.9. The total marketing expenditure incurred by FACT increased from Rs. 80.25 lakhs in 1964-65 to Rs. 186.97 lakhs in 1967-68. This worked out to an average of Rs. 67 per tonne of sales in 1967-68 as against Rs. 49 per tonne in 1964-65. However because of large increase

in selling price of fertilisers the percentage of expenditure to sales came down from 12.88 per cent in 1964-65 to 12.37 per cent in 1967-68.

4.10. The following statement shows the details of marketing expenditure during four years and the percentage increase for each item every year as compared to the previous year:—

	Rupees in lakhs							
	1964-65		1965-66		1966-67		1967-68	
1 Salaries	6.75	9.61	+42%	13.97	+45%	23.36	+67%	
2 Rent/Hire	5.45	6.13	+12%	5.95	+3%	9.09	+53%	
3 Rates/Taxes	1.31	1.75	+34%	1.87	+5%	6.18	+230%	
4 Postage/ Telephones	1.00	1.24	+24%	1.96	+58%	1.32	-32%	
5 Printing/ Stationery	1.11	2.25	+102%	2.46	+9%	1.23	-50%	
6 Travelling Allowances	2.29	3.62	+58%	5.65	+56%	5.21	-8%	
7 General Charges	2.81	3.65	+30%	7.83	+115%	7.45	-5%	
8 Depreciation	0.50	0.75	+60%	1.00	+33%	1.17	+17%	
9 Insurance	1.44	1.87	+30%	1.52	-19%	2.02	+33%	
10 Commi- ssion	17.29	20.83	+20%	30.48	+46%	38.74	+27%	
11 Freight, handling	35.60	37.88	+6%	65.01	+72%	81.23	+25%	
12 Advertis- ement & Publicity	4.70	5.37	+14%	6.73	+25%	9.98	+48%	
	80.25	94.96		144.43		186.98		
Sales Value	623.16	620.26	-1%	1056.41	+69%	1511.62	+45%	
Percentage of marketing expenditure to sales value	12.88	15.31		13.67		12.37		

4.11. It will be seen from the above table that there were large increases in establishment expenses such as salaries, rent and hire, travelling expenses, etc. The expenditure on salaries showed even more than proportionate increase in the value of sales.

4.12. During evidence, the Committee discussed the desirability of appointing a sole selling agent for the marketing of fertilisers. The Managing Director felt that if a sole selling agent was entrusted with the market-

ing he could let down FACT any time by not lifting the entire production. Further, in South India it was a very competitive market. Educational programmes, sales promotion, fairs and exhibitions, seminars, study classes, demonstration farms, etc. had to be set up which cost a lot of money. If that money had to be spent by the sole selling agent, he would not have much profit in the whole bargain unless the prices were put up. Prices could not be increased because market determined the prices. In fertiliser trade all over the world even in countries like Germany and the United States, distribution was controlled by the producer himself.

4.13. In this connection the Committee find that the Coromandel Fertilisers Ltd. has adopted the sole selling agency system. It has appointed E.I.D. Parry Ltd. as its principal selling agent which has 1500 distributors to handle Coromandel products. The total commission paid to them during 1967-68 was Rs. 28.28 lakhs. In addition a sum of Rs. 3.39 lakhs was paid for expenditure incurred by them in respect of 'seeding programme' a promotional work to popularise Coromandel fertilisers among the farmers. The total amount paid by the Company to the sole selling agent was thus Rs. 31.67 lakhs or 2.8% of the total sales during the year. As against it, the expenditure incurred by FACT on commission to agents, persons employed for marketing and on advertising and publicity amounted to Rs. 72.36 lakhs which worked out to 4.8% of the total sales in 1967-68.

4.14. The Committee also called for information about expenditure incurred by Fertiliser Corporation of India for marketing of their products. They were informed by F.C.I. that the sale of fertilisers produced by the factories producing nitrogenous fertilisers was handled by the central fertilisers pool and the factories were paid retention prices to cover the ex-factory cost. However with the revision of the policy of the Government of India allowing free sale of fertilisers by the manufacturers, the existing factories of F.C.I. *i.e.* Sindri, Nangal and Trombay were allowed to sell a portion of their production directly from October 1965. With effect from January, 1969, the pool had decided to allow the above factories to sell the entire production in the free market. Marketing activities as such became prominent only after the introduction of the free sale in the case of nitrogenous fertilisers from October, 1965 and commissioning of the Trombay unit which produced a complex fertilizer, which was allowed to be marketed by the F.C.I. direct.

4.15. F. C. I. also furnished details of the actual expenditure incurred on marketing by the Trombay unit (which as stated above marketed complex fertilizers direct) for 1967-68 and the estimated expenditure for the year 1968-69 and 1969-70. It was stated that on the basis of the actual/expected sales and the marketing expenses for the year 1967-68 to

1969-70 the percentage of expenses to the total sales would be about 1.2 to 2%. The volume of sales in FACT and Trombay unit was also the same. The expected sales in 1968-69 were estimated to be of Rs. 16.46 crores in the Trombay unit as compared to Rs. 15.61 crores in case of FACT in 1967-68.

4.16 During evidence the Secretary of the Ministry stated that F.C.I.'s marketing organisation was not comparable in size with the FACT which had done much more work in propagating the fertilisers in the market than F.C.I. had done so far. Further, F.C.I. had not compiled information on the lines on which FACT had submitted data to the Committee. F.C.I. had not compiled information on the expenditure incurred on railway transportation. The Secretary promised to furnish a comparative statement about the marketing cost in both F.C.I. and FACT. This information is however still awaited.

4.17. **In the absence of any further information, the Committee cannot help concluding from the facts stated in the earlier paragraphs that the expenditure incurred by FACT on marketing which was over 12 per cent of the sales value was somewhat on the high side.**

4.18. **The Committee appreciate the work done by FACT in developing an elaborate marketing organisation in South India for the sale of fertilisers. They also realise the need for promotional and publicity work to educate the farmers about the use of fertilisers and their correct application. The Committee, however, feel that the expenditure on marketing organisation has increased at a faster rate than the increase in quantum of sales would justify. There is, therefore, a need for critical study of the marketing organisation and the expenditure incurred on it. The Committee feel that with the increase in volume of production and sales in coming years, the incidence of marketing expenditure per tonne of sales could be brought down if a strict control is maintained over the marketing expenditure.**

4.19. **In this connection the Committee find that FACT has established its regional offices even at places where there was not much sales activity e.g. in Delhi and Bombay. The Secretary of the Ministry admitted during evidence that Delhi and Bombay were two places where, perhaps, existence of these offices could be objected to and the Ministry had suggested it to the Committee of Directors, appointed by FACT to study the scope for economy in expenditure to go into the necessity of these two offices being continued.**

The Committee trust that early steps will be taken to bring down the marketing expenses.

B. Sundry Debtors

4.20. The following table indicates the volume of book debts and sales for the last three years:—

	Total book debts		Sales (including services rendered)	Percentage of debtors to sales.
	Considered good	Considered doubtful		
As on	(Rupees in lakhs)			
31-3-1966	67.21	1.00	620.26	11.00
31-3-1967	221.82	0.91	1054.37	21.12
31-3-1968	312.61	1.57	1511.62	20.78

The sundry debtors represented 1.3, 2.5 and 2.5 months' turnover in 1965-66, 1966-67 and 1967-68 respectively.

4.21. The following table indicate the details of the debts outstanding for more than one year as on 31st March, 1968:—

(Rupees in lakhs)

	Government Departments	Private Parties.
1. Debts outstanding for more than 1 year but less than 2 years.	31.89	4.71
2. Debts outstanding for 2 years and more but less than 3 years.	0.63	2.36
3. Debts outstanding for 3 years and more	2.85	1.32
Total	35.37	8.39

4.22. The Committee enquired the reasons for large increase in Sundry Debtors. They were informed that during 1967-68 the production had gone up and FACT was entering new markets. Further, sales were normally on 4 months credit and this accounted for the large outstandings.

4.23. As regards outstandings of Rs. 44.76 lakhs for more than one year, it was stated that major portion was due from the Government of India. Collections from Government Departments took considerable time. Efforts to collect the amount were being made through correspondence and by personal contacts.

4.24. In this connection it is noted that a large amount was outstanding against Mannam Sugar Mills Cooperative Society Ltd. It was pointed out by the Auditors of FACT in their Report on the accounts for 1967-68 that the amounts due from the Society as on 31st March, 1968 were as follows:—

- (i) Account No. I in the books of Depot Central Office Rs. 6,03,787.16 (including over-due amount of Rs. 2,55,055.70).
- (ii) Account No. II in the books of Head Office—Rs. 13,061.77 (Amount due for technical and other services rendered by the Company in 1963 appearing in the books of Head Office).
- (iii) Account No. III Rs. 6,039.47 (Amount due in respect of materials loan transaction appearing in the books of Udyogamandal unit).

4.25. The total amount outstanding from the Society was thus Rs. 6.23 lakhs. This included amounts due for technical and other services rendered by FACT as early as in 1963-64 and also an overdue amount of Rs. 2.55 lakhs.

4.26. In their Reports on the accounts of FACT, the Auditors repeatedly pointed out the need for realising the large amount outstanding against this Society. As on 31st March, 1966 the amount outstanding against the Society was Rs. 5.53 lakhs. The Auditors of FACT then observed as follows:—

“Special remarks are necessary in regard to amount of Rs. 5,52,850.16 due from M/s. Mannam Co-operative Sugar Mills Ltd., Pandlam for the supply of sugarcane mixture by the Company. According to the agreement entered into by the company, long term credit facilities extending upto 18 months have been allowed to this debtor-society. There is also a stipulation in the said agreement that interest at 7% will be charged on the value of the sugarcane mixture from the date of invoicing to the date of payment and in the event of default of payment within 18 months, interest at 12% per annum will be charged on all amounts outstanding at the end of 18 months.

The agreement which has been approved by the Board of Directors is for a period of 6 years. The debtor is a newly started concern and its financial position is not known or does not appear to have been ascertained by a reference to latest audited Balance Sheet for the Society or otherwise. Considering the

large amount involved and the standing of the debtor, the question of enforcing or taking proper security for the due payment of the debt should engage the immediate attention of the management. Simultaneously the revision of the rate of interest at 7% originally fixed in the agreement will have to be reviewed in the light of higher rate of interest paid to the bankers by the company”.

4.27. In spite of the observations of the Auditors, no active steps were taken to reduce the heavy arrears of dues substantially and/or even otherwise obtain proper security for the payment of the debt. In fact the total amount outstanding as on 31st March, 1968 increased to Rs. 7.30 lakhs inclusive of overdue sums of Rs. 3.58 lakhs. In their Report on the accounts for 1966-67, the Auditors again observed as follows:—

“The latest audit Balance Sheet of the debtor Society as on 30th June, 1966 obtained at our instance and since produced on 6th August, 1967 discloses that as against a paid up share capital of about Rs. 40 lakhs there are accumulated losses of about Rs. 65 lakhs upto 30th June, 1966. The financial condition of the Society is such that in our opinion immediate measures for the speedy realisation of the dues and obtaining the requisite security for the payment of the dues are called for”.

4.28. The Committee enquired during evidence the reasons for continuing supply of fertilizers to the Society without recovering the amount due in spite of repeated comments of the Auditors of FACT. They were informed by the Managing Director as follows:—

“I brought the matter to the Board and wanted a decision to stop the supplies, because there were certain political implications. They said that this was a matter in which the Kerala Government is interested, that they were running the project and we should not stop the supplies altogether. We supplied them in 1967-68 because of the Government Directors insistence and the assurance that Government gave us that we would not be put to a loss”.

4.29. Asked whether the assurance was given in writing or was it only oral, the Managing Director Stated that “the Directors on behalf of the Kerala State Government who are on the Board gave the assurance”. To a further question whether it had been recorded in the Board Minutes, the Managing Director stated: “It is, but not as the Kerala Government; but it is the Board’s decision and that is why it was accepted (by the Board)”.

4.30. The Committee would, however, draw attention in this connection to the following extracts of the relevant minutes of the meeting of the Board of Directors furnished to them at their instance:—

“Considered the report of the Auditors dated 7th August, 1967 on the Accounts for the year ended 31st March, 1967 and Resolved:—

- (1) that the Managing Director be authorised to take appropriate measures to obtain the necessary security from the Mannam Sugar Mills Co-operative Society Ltd. The Board felt that supplies of manures to the Society may be continued”.

4.31. It is evident from the minutes of the Board meeting that instead of giving any assurance that FACT would not be put to any loss, as stated by the Managing Director during evidence before the Committee, the Board of Directors desired that the Managing Director should take appropriate measures to obtain the necessary security from the Mannam Sugar Mills Cooperative Society Ltd.

4.32. As a commercial concern FACT has to see that any agreement entered into by it is to its advantage and enforced to safeguard its interests. But in the case of the agreement entered into with this Society, this was not the case. What is difficult to understand is that inspite of repeated comments of the auditors and even after the resolution of the Board of Directors authorising the Managing Director to take appropriate measures to obtain the necessary security from this Society no action was taken to secure the amount outstanding against the Society which amounted to Rs. 6,13,512 as on 31st December, 1968. The Committee are concerned to note that as pointed out by Auditors of FACT the financial position of the Society has gone from bad to worse. As on 30th June, 1967, the total loss carried forward amounted to Rs. 87.50 lakhs thereby completely wiping out the paid up share capital of Rs. 40.86 lakhs and leaving no cushion whatsoever for the unsecured creditors. The Committee, therefore, cannot help concluding that in the present case the Management did not act in the best interest of FACT.

The Committee hope that immediate steps would now be taken by the Management to safeguard the amount due from this Society.

MATERIALS MANAGEMENT

A. Inventories

5.1. The following table indicates the comparative position of the inventory and its distribution at the close of three years:—

(Rupees in lakhs)

	1965-66	1966-67	1967-68
(i) Raw materials	63·88	151·73	400·85
(ii) Stores & Spares	223·17	239·56	297·08
(iii) Finished goods	51·42	225·94	330·26
(iv) Others	4·87	3·46	..
Total	343·34	620·69	1028·19

5.2. The stock of raw materials, stores and spares and others was equivalent to 9.6 months' consumption in 1967-68 as compared to 7.7 months' consumption in 1966-67 and 11.4 months' consumption in 1965-66. The stock of finished goods represented about 2.7 months' sales (excluding services rendered) during 1967-68 as compared with 2.6 months' during 1966-67 and 1 month's during 1965-66.

5.3. The Committee enquired the reasons for the increase in the inventories during 1967-68 as compared to 1966-67. They were informed that the rise was mostly on account of raw materials. The stock of raw materials was worth Rs. 400.85 lakhs at the end of 1967-68 as against Rs. 151.72 lakhs at the end of 1966-67. Consequent on the shortage of sulphur experienced in 1966-67 FACT had built up stocks for about 6—8 months consumption based on optimum production in order to ensure that production did not suffer for want of critical items. This resulted in an increase in the holding of raw materials. As on 1st January 1969 the value of raw materials had, however, come down to Rs. 234 lakhs.

5.4. As regards stores and spares, it was stated that in a complex system, where plants had been imported from different sources, they had to carry spares to meet various contingencies. Quite a lot of these spares were insurance items to meet emergent situations. Otherwise the plant might not be able to operate pending import of the necessary spares. The value of such slow moving spares was Rs. 65.54 lakhs.

5.5. The Committee find that even if the slow moving spares were excluded, the value of stores and spares was quite high (Rs. 297.08 lakhs) and was equivalent to about 30 months consumption in 1967-68.

5.6. In this connection, the Committee would draw attention to the following observations of the Auditors of FACT in their supplementary Report for the year ending 31st March, 1968:

“Last year, we had occasion to point out that the system of procurement and disposal of stores as at present obtaining in the company does not properly ensure that stores in excess of the reasonable requirements of maintenance and production are not accumulated and that surplus or unserviceable stores and their value periodically determined. We further observed that the Palit report has not been implemented in this regard. It is now found that the items which have not moved for the past one to five years according to list prepared upto 22nd June, 1968, number about 8,000 valued at Rs. 31.88 lakhs. For completing the review of the remaining items, a committee consisting of SR (CD) and AFM (DA) has been set up by the Managing Director to conduct the said review and prepare a list of items which can be transferred from the Inventory and disposed of”.

5.7. The Committee trust that the review of all the stores would be completed expeditiously and action taken to dispose of the surplus items in order to reduce the inventories. They also hope that the system of procurement of stores would be so organised as to ensure that the stores in excess of the laid down reasonable quantities are not accumulated.

B. Finished goods

5.8. As shown in table in para 5.2 above, the stock of finished goods represented about 2.7 months sales (excluding services rendered) during 1967-68 as compared to one month's during 1965-66.

The Committee were informed that there was no sale of fertilisers from the beginning of January to the middle of April. During this period whatever was produced was put in the godowns. This explained the high stock of finished goods on 31st March, every year.

5.9. The Committee, however, find from the written information furnished to them subsequently, that the average stock of finished goods even on 1st January, 1969 was about 2.3 months production. Considering that FACT has a vast marketing organisation and the fertilizers were in short supply and also large quantities of fertilizers had to be imported every year to meet the internal demand the Committee feel that these stocks are high and the reasons for this need to be looked into.

C. Consumption of raw materials

5.10. The following table shows the designed ratio and average actual consumption of various raw materials during 1967-68 in various plants.

	<i>Designs</i>	<i>Actual</i>
Naptha to Gas (Hydrogen)	0.382	0.404
Hydrogen to Ammonia	2.092	2.822
Sulphur to Sulphuric Acid	0.344	0.345
Rockphosphate to Phosphoric Acid	3.38	3.48
Ammonia to Sulphate	0.275	0.342
Ammonia to Phosphate	0.201	0.214
Sulphuric Acid to Ammonium Sulphate	0.765	0.772
Sulphuric Acid to Ammonium Phosphate	0.420	0.428
Phosphoric Acid to Phosphate	0.217	0.224

It would be seen from the above statement that the consumption of various raw materials was much higher than the designed rations.

5.11. The higher consumption of the raw materials greatly affected the production of ammonia and other end products. In this connection the Sharma Committee observed as follows:—

“Another major source of loss of ammonia production is the high consumption of hydrogen gas per tonne of ammonia. As per the design, the requirement of hydrogen (as measured at the exit of CO² removal system) would be 2138 Nm³/tonne of ammonia. This figure allows a loss of about 8 per cent in the nitrogen wash and synthesis system which is normal. Actual hydrogen consumption, however, has been ranging between 2500-2600 Nm³/tonnes. This is extremely high especially when it does not take into account the losses due to venting of gases during start ups”.

“Improvement in the hydrogen consumption efficiency alone would have increased the production of ammonia by about 7000 tonnes during the year 1967-68 apart from reducing specific consumption of naphtha. It is, therefore, necessary to conduct thorough investigations into the sources of losses of hydrogen in the Ammonia Plant. With the short time at our disposal, the group obviously could not conduct any detailed study. We, however, believe that most of the losses would be occurring from the gland leaks in the old and new compressors and re-circulators”.

5.12. It was also pointed out by the Sharma Committee that the prevailing nitrogen efficiencies (i.e. nitrogen in end products when compared with nitrogen in ammonia consumed in the end products) had been running low. Based on the designed ammonia conversion efficiencies for individual products and with the present pattern of production the overall designed nitrogen efficiency worked out to 94.6 per cent. As against this, the actual nitrogen efficiencies including nitrogen in ammonia directly sold during the past four years were as shown in the table below. The table also indicates the total quantity of ammonia consumed/lost over and above the quantity allowed for in the design.

Year	Nitrogen efficiency	Ammonia consumed/lost over and above the efficiency.
1964-65	86.1	1800 tonnes
1965-66	84.3	1590 tonnes
1966-67	80.7	4360 tonnes
1967-68	76.5	7800 tonnes

5.13. The Sharma Committee had observed that “the above losses were indeed very high and require investigation. The sharp fall in efficiency in the year 1967-68 seems to be rather baffling”.

5.14. During evidence the Managing Director admitted that the nitrogen efficiency as well as consumption rates of raw materials were not satisfactory. This was stated to be due to poor quality of raw materials like rock phosphate, sulphur, etc., resulting in higher consumption of sulphur, and sulphuric acid. Further the production of ammonium sulphate was based on by-product gypsum which contained a little fluorine which consumed more of ammonia in the process of conversion.

5.15. Another factor was that when the power interruptions occur with the frequency that they did, nitrogen efficiency would automatically come down as plants could not work to an optimum level with the rhythm that was required in chemical plants. When sophisticated plants, of the type FACT had, got shutdown due to power interruptions, the gasses in the process of manufacture got automatically vented. These losses also contributed to reduction in the overall efficiency.

5.16. The Committee were also informed that on the recommendation of the Sharma Committee a Committee of Engineers headed by Mr. P. G. Menon was appointed to make a detailed study of these losses in various plants. This Committee had submitted its report and the recommendations made therein were being implemented.

5.17. The Committee appreciate the difficulties in achieving the designed ratios for the consumption of raw materials because of poor quality of raw materials and power interruptions. But these can hardly justify the excess consumption of hydrogen gas equivalent to 7000 tonnes of ammonia and of ammonia to the extent of 7800 tonnes in converting to the various finished products. Even to a technical committee (Sharma Committee) the loss of ammonia to this extent in 1967-68 was rather 'baffling'. As pointed out in the Report of the Committee of Engineers (P. G. Menon Committee) there were various defects in operation which have contributed to the higher consumption of raw materials. The Committee hope that the recommendations of the two technical committees will be implemented to save FACT from avoidable loss due to very high consumption of raw materials.

5.18. In this connection, the Committee would also draw attention to the following observations of the Auditors of FACT in their supplementary report to the Comptroller and Auditor General India for the year ending 31st March, 1968.

"A scrutiny of the Annual production report for the year of account has disclosed that the operating efficiency (ratio of consumption of raw materials to design ratios) is abnormally below the designed ratio involving heavy wastage in the process of production.

Though the usage variance reports were circulated in this behalf to the production department from month to month for their remarks, no satisfactory reasons could be/were adduced for a long time in explanation for such abnormal wastage. It was only after persistent discussion by Managing Director at several meetings with the top executives of all the departments, that the defect was ultimately traced out to certain leakage in the pipes of the plant concerned resulting in excessive consumption of sulphuric acid.

The variance reports further show that there was similar loss in the usage of ammonia too. Immediate action was not initiated by the Production department to locate the cause for such wastage and take prompt remedial measures”.

5.19. The Committee cannot help observing that control over consumption of raw materials left much to be desired. The Management must be receiving reports of daily consumption of raw materials. The Committee cannot understand as to why the Management did not take timely action to reduce the over consumption of raw materials but had to wait for the Auditors and the Sharma Committee to highlight this fact. They desire that constant watch over the consumption rates of various raw materials should be kept and whenever any major variations are noticed as compared to designed ratios, prompt steps should be taken to locate the reasons for higher consumption with a view to taking immediate remedial measures.

VI

ORGANISATION

A. Board of Directors

6.1. According to the Articles of Association the Board of Directors of FACT can consist of 15 Directors. Of these five shall be non-retiring Directors. They are :

- (a) Two Directors nominated by the Industrial Finance Corporation;
- (b) One Director nominated by the President of India in his capacity as guarantor of the loan taken from the Industrial Finance Corporation;
- (c) One Director nominated by the State of Madras;
- (d) One Director nominated by the State of Kerala.

The other ten Directors are elected at the annual General Meetings in accordance with Article 90 of the Articles of Association.

6.2. The composition of the Board of Directors at the end of the year 1967-68 is given in Appendix. II.

6.3. It will be seen therefrom that out of 10 elected Directors, four were officials of the Government of Kerala. The remaining six persons were chosen by the Government of India. Out of these three were officials of Government of India and three non-officials, (including the Chairman). Thus, out of 14 Directors, there were 10 officials of the State/Central Government.

6.4. The Committee were informed during evidence that from September 1968, the Central Government have ten seats under their control. Out of these three were non-officials elected with the support of the Central Government and the remaining were officials.

6.5. Asked about the reasons for having so many officials on the Board, the Secretary of the Ministry stated as follows:

“We feel that seven officials including the Managing Director is a fair reflection on the share holding of the Company, that the Central Government should have the ability to influence the policies of the Company in the Board of Directors by having adequate representation of officials on the Board.”

6.6. The Committee do not consider it conducive to effective management of a large and complex business enterprise like FACT to have such a preponderance of officials on the Board of Directors. Persons on the Board of Directors should mainly be those who have experience of the industry or special knowledge of commercial, financial and administrative matters or of labour management.

6.7. The Committee also find that at present only the Managing Director is a full time member of the Board. With the large expansion of FACT, they felt that it would be useful to appoint one or two full time functional Directors. The Committee, therefore, desire that the composition of the Board of Directors might be reviewed to make it more effective and business like.

B. Personnel

6.8. The following table shows the total number of persons employed during three years and its break up under various categories.

	1966 31-12-66	1967 31-12-67	1968 30-9-68
Managerial	197	221	258
Supervisory (Technical)	350	255	382
Supervisory (non-technical)	128	145	190
Clerical	548	643	806
Skilled	1558	1616	1425
Semi & unskilled	1181	1308	1389
Daily	274	300	330
TOTAL	4236	4488	4780

6.9. In addition, the number of persons employed in 1967 and 1968 in FACT Engineering and Design Organisation and Cochin Division were as follow :—

	1967	1968
FEDO		
Managerial	92	109
Supervisory	39	49
Clerical	48	46
Workmen	53	98
Cochin Division		
Managerial	49	94
Supervisory	79	89
Clerical	39	70
Workmen	42	140

6.10. The Committee enquired whether before taking up the Third Stage Expansion any assessment was made about the requirements of persons on reaching the rated capacity. They were informed that a complete work-study and job evaluation of the whole factory was done only from 1965 onwards. The work force in position at present was on the basis of this work study. Asked whether there was any surplus staff the Managing Director stated during evidence that barring 80 or 90 unskilled workers, there was no surplus staff.

6.11. The Committee find from the Annual Report of the Coromandel Fertilisers Ltd., that the expenditure incurred by that Company on salaries and wages (including other welfare expenses) in 1967-68 was Rs. 97.80 lakhs i.e., 8 per cent of the value of production in 1967-68 as against Rs. 187.49 lakhs in FACT which works out to about 12 per cent of the total value of production. Thus the expenditure by FACT on salaries and wages was about 1½ times of that in Coromandel Fertilisers Ltd.

6.12. It was contended by the Managing Director during evidence that the modern plants like Coromandel Fertilisers Ltd. could not be compared with FACT as these were more 'automatic instrument controlled'. The Committee, however, cannot ignore the fact that in FACT also a major portion of the plant and machinery was erected under the Third Stage Expansion which was commissioned only in 1966. The Committee, therefore, feel that there is scope for economy in expenditure on staff.

6.13. As pointed out in para 4.10 of this Report, the expenditure in 1967-68 on salaries of staff employed for marketing was 3½ times of that in 1964-65 whereas the increase in sales during the corresponding period was only by 142%. The Committee therefore feel that there is a need for review of the staff strength in the various Divisions of FACT.

6.14. In this connection it was also noticed that out of 4780 persons employed (excluding FEDO and Cochin Division) 1719 persons were semi, unskilled and daily workers. The number of persons employed in these categories worked out to 56 per cent of those in all the other categories. The number of helpers alone was 587.

6.15. Asked about the reasons for having such a large number of helpers, the Committee were informed that for the wood gasification plant FACT had employed 500 to 600 unskilled men to chop fire wood. When that plant was scrapped it was not possible to retrench those men. Some of them were trained for semi-skilled jobs. 124 persons were engaged in bagging of finished products, others were being utilised as casual labour needed within the factory for various purposes like cleaning or to assist operators, maintenance men. The Committee were also informed that in the new unit they were trying to avoid helpers.

6.16. The Committee realise the difficulties in retrenching the unskilled persons employed by FACT in the past. However, what is surprising is, that there has been a continuous increase in the category of semi and unskilled workers. Further, in spite of having a large number of semi and unskilled workers, there were 330 workers employed on daily wages. The number of semi, unskilled and daily workers having thus reached 1719 which was 56 per cent of the persons in all the other categories. The Committee therefore desire that the need for having daily wage workers in addition to a large number of semi and unskilled workers should be reviewed.

6.17. The Committee feel that exact measurement and evaluation of the performance of the staff of FACT at all levels by an outside expert body is necessary so that extent of surplus staff is determined. This appraisal will also provide an unbiased yardstick for the management to judge the future performance and maintain control over the operations.

Appointments

6.18. The Committee received representations from some quarters about the manner in which appointments were made to certain posts in FACT without advertisements. Several top posts were stated to have been filled by appointment of retired officers or deputationists.

6.19. The Committee were informed by the Managing Director during evidence that normally all posts were advertised. But some times advertisements did not give 'result' and there were cases where persons had to be called on deputation. Such appointments were made after they had been found suitable by the staff selection Board.

6.20. The Committee were also informed that FACT had appointed 10 persons after superannuation and 9 persons were on deputation. The basic reason for these appointments was that although the company had been there since 1944 it was a small one with no organised method of recruitment till 1959-60. It was in 1961 that FACT started a management development programme. Executives were recruited on the basis of stiff competition. The same method was adopted for technical personnel upto the level of junior engineers. During the last six or seven years these people had come up and were taking up responsible positions. But the expansion had been so rapid that they did not have adequate number of men to take up higher posts. If younger men were recruited to fill these posts it would affect the morale of those who were coming up and who had some experience. Therefore some deputationists or retired persons were appointed for two or three years. This was unavoidable in the present circumstances. Some of the persons so appointed were like Chief Agronomist, Chief Engineer in charge of Construction of Cochin project,

two persons in Accounting Department—one for works accounts and another for internal audit, a well known surgeon for the hospital, etc.

6.21. The Committee were also informed that the selection was made by the Selection Committee of the Board consisting of the Chairman and three others including one from the Kerala State Government. No direct recruitment was made or a deputationist taken or a retired person employed whenever a suitable man from within the plant was available. They were also training up persons in the second line to substitute retired persons or those on deputation.

6.22. In view of the statement made by the Managing Director before the Committee and considering the autonomy granted to the public undertakings in making appointments the Committee do not consider it necessary to go into individual cases of appointments of persons without advertisement or of retired persons/deputationists, etc. They would, however, stress that the success of any undertaking largely depends on the persons manning it. The persons who have the authority to make appointments should so act as to avoid any criticism on the score of favouritism in making appointments.

VII
FINANCIAL MATTERS

A. Financial Position

7.1. The table below summarises the financial position of FACT under broad heading for three years :

(Rupees in lakhs)

	1965-66	1966-67	1967-68
LIABILITIES			
(a) Paid-up capital (including advances for shares)	745.98	745.98	745.98
(b) Reserves and surplus	78.33	68.13	64.69
(c) Borrowings: (i) From Government of India	875.00	1210.00	2072.50
(ii) From Government of Kerala	3.54	3.34	4.29
(iii) From Industrial Finance Corporation	216.89	195.54	174.25
(iv) From Banks	227.45	380.18	554.00
(d) Trade dues and other liabilities (including provisions)	266.39	5461.33	828.05
Total	<u>2413.58</u>	<u>3149.50</u>	<u>4443.76</u>
ASSETS			
(e) Gross block	1081.75	2317.92	2464.68
(f) Less: Depreciation	462.65	563.62	687.67
(g) Net Fixed assets	619.10	1754.30	1777.01
(h) Development projects (including expenses to be capitalised)	1099.88	307.35	785.56
(i) Current assets and advances (including investments)	575.91	1020.89	1810.75
(j) Miscellaneous expenditure and loss	118.69	66.96	70.44
	<u>2413.58</u>	<u>3149.50</u>	<u>4443.76</u>
Capital employed	948.62	2251.22	2782.15
Net worth	705.62	747.15	740.23

NOTE: 1. Capital employed represents net fixed assets plus working capital.
2. Net worth represents paid-up capital plus reserves less intangible assets.

B. Working results

7.2. The economics of the Third Stage Expansion were worked out by FACT before taking up its execution. According to these estimates, the working results were in a nutshell expected to be as follows from 1965-66.

	(Rs. in lakhs)
Sales & Receipts	1450.00
Manufacturing, selling & Administrative expenses	1150.00
Profit subject to allocation of Depreciation, Bonus, etc.	300.00

Out of this amount after providing for depreciation of Rs. 150 lakhs and making other appropriations towards income tax, development rebate reserve, general reserve and bonus, FACT was expected to declare a dividend of 8 per cent on equity capital.

7.3. As against this the actual working results for the three years 1965-66 to 1967-68 were as follows :

	(Rs. in lakhs)		
	1965-66	1966-67	1967-68
A. GROSS PROFIT (Sales minus cost of production, but before deducting depreciation)	126.10	351.27	430.44
<i>Adjust:</i> Difference in price from Government of India	(—) 29.89*
	96.21	351.27	430.44
B. PROFIT before charging depreciation	(L) 8.42	143.99	117.05
<i>Adjust:</i> Difference in price received from Government of India	(—) 29.89*
	(L) 38.31	143.99	117.05
C. Depreciation charged	61.43	100.53	119.38
D. Net profit or loss (after depreciation and prior years adjustments)	(L) 69.85	43.46	(L)2.33
<i>Adjust:</i> Difference in price received from Government of India	29.89
	(L) 99.74	43.46	(L)2.33

N.B. L. denotes loss

* Additional amount received from the Central Government in the year on sales of ammonium sulphate relating to prior years.

7.4. Thus, it would be seen that as against an estimated profit of Rs. 900 lakhs during 1965-66 to 1967-68, the company actually had a profit of Rs. 222.73 lakhs or only 24.7 per cent of the estimated profits. After taking into consideration the depreciation charges, there was a net loss of Rs. 58.61 lakhs as against the estimated profit of Rs. 450 lakhs.

7.5. The main reasons advanced for not achieving the estimated results were as follows:—

(i) Due to severe power cuts, the Third Stage plants could not be commissioned in 1965-66. Even in 1966-67 and 1967-68 these have not worked to maximum capacity. In 1966-67 the plants were commissioned only by the middle of the year, and hence the working results do not show the benefits which it derived out of the expansion.

(ii) Similarly in 1967-68, there was shortage of raw materials with the result that it was not able to achieve full production.

(iii) Apart from this, there were power-offs and voltage drops which hampered production very badly.

7.6. The various factors which have adversely affected the working results, like low production, higher consumption of raw materials, high marketing expenses etc., have been dealt with in the previous chapters of this Report. It is however noticed that the value of production increased from Rs. 1263.49 lakhs in 1966-67 to Rs. 1666.07 lakhs in 1967-68. The value of sales also showed an increase from Rs. 1088.97 lakhs to Rs. 1561.75 lakhs during the corresponding period. But in spite of increase in production and sales there was considerable shortfall in profits in 1967-68 as compared to 1966-67. The comparative position during these two years was as follows:

(Rupees in lakhs)

	1966-67	1967-68
Profit before tax and prior years adjustments	43.46	19.60
Percentage of profit before tax.		
(a) To sales (including income from services rendered and value of works certified on partly executed contracts)	4.0	1.3
(b) To gross fixed assets	1.9	0.8
(c) To capital employed	1.9	0.7
(d) To net worth	5.8	2.6
(e) To equity capital	5.8	2.6

7.7. The profits as shown above was after taking into account the profit earned by the FEDO Division of FACT which was a separate Division for undertaking design and engineering works. If the profit from this Division was to be excluded the net profit during 1967-68 would only be Rs. 4.34 lakhs as against 41.42 lakhs in 1966-67. This would work out to 0.3 per cent to total sales in 1967-68 as against 3.9 per cent in the previous year.

7.8. The Committee find that one of the reasons which affected the working results of FACT was laxity of control over expenditure.

Some of the instances of excessive expenditure, which came to the notice of the Committee are given below :

- (1) The travelling expenses increased from Rs. 2.30 lakhs in 1964-65 to Rs. 12.83 lakhs in 1967-68 *i.e.*, a six fold increase within a period of three years. As against it the increase in the value of production/sales during the corresponding period was less than three times.
- (2) There was large expenditure incurred on participation in exhibitions/fairs. The total expenditure incurred for participating in two fairs alone was Rs. 3.90 lakhs—Rs. 5.92 lakhs on Indian International Trade and Industries Fair at Madras and Rs. 9.98 lakhs on UNCTAD Fair.
- (3) In addition to a guest house, it constructed another building called FACT House at a cost of Rs. 5.52 lakhs. It was stated that FACT House was constructed to accommodate foreign technicians who came to help in construction and erection of the plants and bachelor executives. It also accommodated customers, visitors etc., on payment. However, after taking into account the receipts, the net running expenditure on Guest House and FACT House during the two years (1966-67 and 1967-68) was Rs. 1.17 lakhs and Rs. 32 lakhs respectively. Besides, FACT has guest rooms attached to its regional offices at Bombay, Madras, Delhi and Trivandrum which provide lodging facilities and breakfast.

In reply to a question the Secretary of the Ministry stated during evidence that such large expenditure need not have been incurred on travelling and fairs.

7.9. The Committee do not question the objective of expenditure on such items like travelling, exhibitions/fairs, maintenance of guest house, etc.. But they see no justification for such large expenditure on these items especially under the present circumstances when the financial results of FACT can hardly be considered satisfactory. It was admitted by the Secretary of the Ministry during evidence that such large expenditure need not

have been incurred on travelling and fairs. Evidently there is need for all round economy and greater control over expenditure to improve its working results.

7.10. The Committee were informed during evidence that at the initiative of the Ministry, the Board of Directors had set up a Committee of five Directors, including the Managing Director, to study the scope for economy in expenditure in FACT. The Committee of Directors was going into the whole question of control over expenditure.

7.11. The Committee were also informed that the Ministry had come to the conclusion that Financial Manager of FACT was not consulted by the Management as he ought to be before any expenditure was incurred. One of the instructions which the Ministry had given recently was that this system should be changed and that there should be more regular consultation with the Financial Manager.

7.12. The Committee regret to note that the Financial Manager was not consulted as he ought to be before any expenditure was incurred. It is however strange that this fact was not mentioned by the Financial Manager in any of the Quarterly Financial Reviews submitted by him to the Board of Directors/Government during the last three years. He has also not pointed out any case, where in his opinion, there was excessive expenditure and scope for economy. Some such instances pointed out by the Auditors of FACT did not find a place in the Quarterly Financial Reviews. In fact, these Reviews were not as comprehensive as they ought to be. The Committee desire that on the lines of the instructions issued by the C. & A.G. to the Company Auditors, Government should issue suitable instructions to the public undertakings about the main items which should be included in the Quarterly Financial Reviews.

7.13. The Committee also trust that the Committee of Directors appointed to study the scope for economy in expenditure will examine in detail the expenditure on various items to locate the areas where economies can be effected. It should also review the present procedures and suggest suitable changes for ensuring greater control over expenditure.

VIII

MISCELLANEOUS

A. Cochin Fertiliser Project

8.1. The Cochin Fertiliser Project is being put up as another unit of FACT at Ambalamedu adjacent to the Cochin Refineries. Involving a total capital investment of Rs. 45 crores, the first phase of this project is intended to produce 200,000 tonnes of ammonia to be converted into 330,000 tonnes of urea per annum. This plant will be employing the most modern technology, *i.e.*, the ICI steam reforming process for the manufacture of synthesis gas, centrifugal compressors for the compression of gas and the modern way of utilising size to attain economy. The ammonia plant will have a capacity of 600 tonne per day in single stream. The urea plant will have two streams of 500 tonnes per day.

8.2. A second phase of the project for the manufacture of 150,000 tonnes of P_2O_5 in the form of triple superphosphate is under the consideration of the Government of India at present.

8.3. One of the special features of the project is that it would employ the electric-thermal route for the reduction of rock phosphate into elemental phosphorous thereby saving the import of sulphur.

8.4. The project is being constructed jointly by FEDO Division of FACT and P and D Organisation of F.C.I. Of the two major plants in the Cochin Project (ammonia and urea) FACT is constructing the steam reforming and gas purifications sections of the Ammonia Plant. F.C.I. has the responsibility for the design and engineering of the Ammonia Synthesis and Urea plant. All other items of work relating to the Cochin Project like general layout, design and engineering of off-site facilities, utilities etc. are being done by FACT. Collaboration agreements have been entered into by FACT with Power-Gas Corporation of U.K. for know-how in regard to steam reforming and gas purification and by FCI with Montecatini Edison of Italy for know-how for ammonia synthesis and urea processes.

Delays in Construction

8.5. As in the case of the Fourth Stage Expansion of Udyogamandaf Unit there were delays in construction of the Cochin Project also. According to the original schedule with target date as 1st June 1969 for the com-

pletion of the project, the contracts for the main items were scheduled to be finalised by March, 1967. But actually the contract was signed on 3rd February, 1968.

8.6. As regard the reasons for the delay of about one year in placing of contract, the Committee were informed that FACT had submitted the application for foreign exchange in September, 1966. At that time it was assumed that Government of India would be releasing foreign exchange from free resources based on the procedure then followed by Government. But the Ministry conveyed the tentative allocation of foreign credits from Italy, France, West Germany and U.S.A. FACT's enquiries for the several equipment were floated in January/February, 1967 after the designs were finalised. The foreign suppliers invariably quoted on the basis of cash payment against shipping documents. After the receipt of above order from the Government FACT had to float another set of enquiries to the respective countries inviting supplies under the credit. Thus it was mainly the difficulty of foreign exchange which resulted in delay in placing of contract.

8.7. The Committee enquired whether the difficulties of free foreign exchange could not be foreseen when the project was finalised. The Secretary of the Ministry stated during evidence that at that time it was expected that free foreign exchange would be made available. The Government had announced their readiness to release free foreign exchange for the purpose of procurement of equipment up to about Rs. 5 to 6 crores. But later on the free foreign exchange position deteriorated and the Government was unable to find this large amount of money from free resources. Therefore, they had to look around for credit from different sources. The Committee were also informed that the reliance on credit resulted in about 20 per cent increase in capital cost of the project.

8.8. Because of the delay in placing orders, etc., a revised schedule was drawn up according to which the whole project was expected to be completed by October, 1969. The Committee were, however, informed that there was every possibility of the present date getting extended. The reasons advanced was that the target date was drawn up with the supply schedules given by indigenous and foreign suppliers. There were shifts in these delivery schedules due to various reasons. As a result of these delays in the supply of items, the time available for erection had been considerably reduced. Piping and instrumentation erection could not be compressed too much. As such there was likely to be delay in construction.

8.9. During evidence, the Chief Project Officer in the Ministry admitted that the project was likely to be delayed by four to five months. The Co-ordination Committee for this project was seized of the matter. There had been delays in engineering works on the part of F.C.I. as well as

FACT. He, however, pointed out that at present the delay in completion of the project was not because of F.C.I. or FACT but due to the delay in delivery of equipment fabricated within the country. In many cases the suppliers of equipment had not undertaken these works. As soon as Co-ordination Committee was seized of the matter, the Ministry of Industrial Development was asked to take up the matter with the manufacturers. Recently a seminar was held with the manufacturers to see what they could do to improve the matters. It was added that it was probably the first occasion when a large fertiliser plant of this type was being fabricated in the country. Therefore, it took time for some fabricators to come upto the expectations. The Committee were informed that a delay of four months would result in shortfall in production of about 3.48 crores and additional capital expenditure of Rs. 1.08 crores.

8.10. It is unfortunate that due to some reason or the other there have been delays in the construction schedule of the Cochin Fertiliser Project. The delays in construction result in considerable loss of production and increase in capital cost. The Committee therefore desire that every effort should be made to commission the plant as early as possible.

8.11. The Committee have also noted with regret the inability of the Government to release free foreign exchange for import of equipment for this project with the result that the equipment had to be purchased from the countries whose Governments had granted credit facilities. This has resulted in extra expenditure of 20 per cent. in import of equipment. The Committee are not sure whether non-release of free foreign exchange leads in each case to such excessive increase in the price of imported equipment when it is obtained under credit facilities. The Committee feel highly concerned about this oppressive burden which the public undertakings are called upon to bear due to lack of free foreign exchange. They would suggest Government should make an all out effort to find a solution to this problem.

B. Fact Engineering & Design Organisation

8.12. In view of the considerable experience gained by FACT during the long period of its growth, the Government directed FACT to strengthen its design organisation to undertake construction of three fertilizer plants during the Fourth Five Year Plan. Accordingly FACT Engineering and Design Organisation (FEDO) was formed in 1964.

8.13. FEDO submitted a detailed project report for the Cochin Fertiliser Project in January 1965. In order to implement the scheme, FEDO was further strengthened as an autonomous division of FACT in early 1966.

8.14. The Committee were informed that FEDO was capable of designing, constructing and commissioning complete nitrogenous and phosphatic fertiliser plants using the process know-how developed by FACT as well

as those secured under licence. It had secured the licence for the use of the ICI steam reforming process for the production of synthesis gas out of naphtha and the ICI process for synthesis of ammonia. It had also secured the famous Prayon process for the manufacture of phosphoric acid by the wet process. It had its own process for the manufacture of ammonium sulphate from by-product gypsum. There was no foreigner employed in FEDO at present. However one difficulty was that India was not in a position to manufacture certain specialised equipments. Such equipments had to be ordered abroad. When these equipments were supplied from abroad, the suppliers' representatives had necessarily to come to India to supervise their erection, commissioning and give the necessary warranty of performance. This was the practice in respect of all equipments, whether indigenous or imported. Barring this FEDO did not need the assistance of any foreigners to design, construct and commission complete nitrogenous and phosphatic fertiliser plants.

8.15. The total value of work done by FEDO was Rs. 47.95 lakhs and Rs. 50.13 lakhs during 1966-67 and 1967-68 respectively.

8.16. The Committee were informed that besides the Cochin Fertilizer Project, FEDO had prepared projects reports for Madras, Mangalore and Tuticorin projects. However, in the meanwhile the Government sent out a high level team to the United States to canvas investors for fertilizer industry. The potential investors from abroad found that the area around Madras, Mangalore showed excellent market potential for fertilisers. As the Government had already committed itself to accept private sector offers, Madras and Mangalore projects were licenced to the private sector. The Committee were also informed that while the Madras fertiliser project was coming up fast, there had been no progress worth the name at Mangalore. FACT's project report for a major fertiliser project at Tuticorin was still under examination of the Government.

8.17. The Committee hope that the Government would ensure that engineering capabilities of FEDO and other such organisations are fully utilised by the fertilizer industry, so that there are no avoidable payments in foreign exchange for acquisition of machinery and services available within the country.

C. General

8.118. In the course of evidence before the Committee on the 18th February, 1969 the representatives of the Ministry of Petroleum and Chemicals promised to furnish information on certain points. A list of such points was sent to the Ministry on the 27th February, 1969. The Committee regret to note that in spite of reminders sent to the Ministry the required information was not furnished by the Ministry till the adoption of the

Report by the Committee on the 11th April, 1969. In the absence of such information it has not been possible for the Committee to comment on certain aspects of the working of FACT. The Committee trust that in future the Government will not allow such a situation to arise.

NEW DELHI;
April 18, 1969

Chaitra 28, 1891 (Saka)

G. S. DHILLON,
Chairman,
Committee on Public Undertakings

APPENDIX

[Vide para 3.7 of the Report]

Stream Efficiency of Gas and Ammonia Plants

Capacity (equivalent ammonia tonnes)	
Electrolysis	15 tonnes per day
Ist stage gasification	80 " "
IIInd stage gasification	140 " "
Total	235 tonnes per day

I. AS PER EXISTING ARRANGEMENTS :

Jobs—

(i) Brick lining of generator in IIIrd stage gasification once a year—21 days

Overall time loss	21X140	= 12.5 days
	235	

(ii) Brick lining of generator in IIInd stage gasification once a year—time lost will be only 4 days required for change over to the standby Unit—

Overall time loss	4X80	= 1.3 days
	235	

2 Changing rams of naphtha feed pumps—once every two months and re-packing glands once every month. Each change involves 24 hours loss of production

Overall time loss	12X220	= 11.1 days
	235	

3 Examination of Kirtle plates of each water scrubber—time required 10 days for each scrubber

$$\frac{10 \times 220}{235} = 9.3 \text{ days}$$
equivalent days loss 9.3

4 Loss due to inspection of waste heat boilers—each inspection requiring 7 days. Inspection of IIIrd stage boiler can be programmed with generator re-lining and IInd stage with inspection of water washer. Time loss would be nil.

Nil,

5 Catalyst change once in 3 years—each change requiring 20 days

Overall time loss
$$\frac{220 \times 20}{3 \times 235} = 6.3 \text{ days}$$
 6.3

6 Deriming/Thawing of Air & Gas separation plants—

(i) Tonnox plant and Gas separation plants—once in 4 months for 2 days each—

Overall time loss
$$\frac{6 \times 220}{235} = 5.6 \text{ days}$$

(ii) Air Liquid and BOE plants—6 days a year

Overall time loss
$$\frac{6 \times 120}{235} = 3 \text{ days}$$
 8.6

7 Replacement of corroded water lines in CO₂ let down system—pipes require replacement once every four years—total time lost 12 days

Overall time loss
$$\frac{12 \times 220}{4 \times 235} = 2.8 \text{ days}$$
 2.8

8 Power interruptions—interruptions which caused shut down of generators during the past two years were as follows :

1966-67	IIInd stage	.	41
	IIIrd stage	.	46
1967-68	IIInd stage	.	15
	IIIrd stage	.	16

Interruptions cause a production loss 6—24 hours depending upon nature and duration. Assuming that interruptions will be no more than 16 in a year and average loss would be 15 hours.

$$\begin{array}{r} 15 \times 16 \times 220 \\ 24 \times 235 \end{array} = 9.3 \text{ days} \quad 9.3$$

9 Electrolyzer maintenance—one day a week

$$\begin{array}{r} 52 \times 15 \\ 235 \end{array} = 3.3 \text{ days} \quad 3.3$$

10 Total shut down once a year for maintenance in sub-stations

11 Unforeseen break-downs—say

3.0
4.0

71.5

Total

Stream efficiency 365—71=294 days.

II. AFTER MAKING IMPROVEMENTS/MODIFICATIONS :

1 Two units of 80 t/day can be operated when IIIrd stage reactor is being brick-lined.

Total production loss would be :

$$\begin{array}{r} \text{For brick lining} \quad 21 (140-80) \\ 235 \end{array} = 5.4 \text{ days}$$

$$\begin{array}{r} \text{During changeover} \quad 8 \times 80 \\ 235 \end{array} = 2.7 \text{ days}$$

From 140 tonne unit to 80 tonne unit (4 days each)

8.1

Jobs—2

With standby naphtha feed pumps installed, the pump can be connected up within a short time—
loss of production for each shut down could be reduced to about 8 hours

*equivalent
days loss*

$$\frac{8 \times 220 \times 12}{24 \times 235} = 3.7$$

- 3 Examination of Kettle plates 3.7
- 4 Boiler inspection nil
- 5 Catalyst charge 6.3
- 6 Deriming/Thawing 8.
- 7 Replacement of pipes after replacement of pipes with Aluminium no loss of time expected nil.

8 Power interruptions—with the emergency Oxygen and Power supply system operating power interruptions/fluctuations will result in loss for period required for stabilising Ammonia plant operations. Assuming 16 interruptions and 3 hours loss each time,

$$\text{Overall time loss} = \frac{3 \times 16 \times 220}{24 \times 235} = 2 \text{ days}$$

- 9 Electrolyzer maintenance 2.0
- 10 Total shut down for maintenance of sub-stations no change 3.3
- 11 Unforeseen breakdowns 3.0

	4.00
Total	48.3

Stream efficiency 365—48=317 days

APPENDIX II

(Vide para 6·1 of the Report)

Composition of the Board of Directors

(i) Shri P. Achutha Menon—Chairman	(elected Director)	Private shareholder
(ii) Shri K. Sreenivasa Karayalar, Trivandrum	„	„
(iii) Dr. V. Venkitanarayanan, Director of Industries and Commerce, Government of Kerala, Trivandrum	„	Official of Kerala Govt.
(iv) Dr. M. S. Nair, Director of Agriculture, Govt. of Kerala, Trivandrum	„	„
(v) Shri K. B. Warriar, Industries Secretary, Trivandrum	„	„
(vi) Shri N. Chandrabhanu, Trivandrum	„	„
(vii) Shri Satish Chandra, Managing Director, Fertilizer Corporation of India	„	Sponsored by Govt. of India
(viii) Shri M. N. Kale, Dy. Secretary, Govt. of India, Ministry of Petroleum & Chemicals	„	Official of Govt. of India
(ix) Shri R. Ganapati Director (Plan Finance), Ministry of Finance	„	Official of Govt. of India
(x) Shri K. S. Dutt, Visakhapatnam	„	Private Shareholder
(xi) Shri K. R.K. Menon, New Delhi	Nominee of IFC	
(xii) Dr. G. P. Kane, Officer on Special Duty, Ministry of Industrial Development and Company Affairs	Nominee of President of India.	
(xiii) Shri V. Ramamurthy, Dy. Secretary, Industries Dept., Madras	Nominee of Madras Govt.	
(xiv) Shri M. K. K. Nayar, Managing Director	Nominee of Kerala Govt.	

APPENDIX III

Summary of Conclusions/Recommendations of the Committee on Public undertakings contained in the Report.

Sl. No.	Ref. to Para No. in the Report	Summary of Conclusions/recommendations
1	2.17	The Committee are not happy over the position of supply of power to F.A.C.T. It is strange that while earlier the State Government was anxious to have a 100 MW thermal power station, the scheme was not approved by the Central Government. Now that the Central Government has approved the installation of a 55 MW. thermal power station, the State Government does not appear to be keen to set it up. The result is that the absence of steady power supply has greatly affected the industries in the region including FACT. The Committee therefore desire that the Central Government should actively pursue the question of early installation of a thermal power station with the State Government. The Committee hope that the State Government would take necessary steps to set up the thermal power plant even at this belated stage so that the Cochin based industries do not have to depend on the vagaries of nature.
2	2.18	The Committee feel that the Third Stage Expansion was ill-timed. FACT depended solely on the indication given by the Kerala State Electricity Board in August, 1961, that they would be able to meet the requirements of power for the Third Stage Expansion without binding KSEB through an agreement for the supply of required power. But by 1962 the possibility of supply of additional power had become doubtful and KSEB informed FACT that they would not be in a position to give additional power from July/August 1964 as desired by it. The supply of additional power even by the end of 1964 was "subject to the condition that Sholayar Station was commissioned by that time". Considering that the Kerala

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State Electricity Board had not been able to meet the Company's requirements of power even since the First Stage Expansion and that in 1962-63 itself FACT had suffered a loss in production worth Rs. 2.5 crores due to power cuts, the Committee feel that it should have examined carefully whether it was desirable to proceed further with its expansion programme unless there was assured power supply. Nor do the Central Government appear to have given proper consideration to this aspect before advancing money for the Third Stage Expansion. Had this been done, FACT would not have faced the problem of keeping the plant and machinery, erected under the Third Stage Expansion, idle for about 1½ years resulting in unnecessary locking up of a capital of Rs. 12 crores besides additional expenditure on staff, interest charges, etc.

2 19 The Committee have pointed out other instances also where the projects in the first instance or after expansion could not be commissioned due to lack of power supply. The Committee suggest 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.

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2 26 The Committee regret to note that the prescribed procedure of approaching the local manufacturers first was not followed by FACT before asking the DGTD for clearance which resulted in avoidable delay in the issue of an import licence for certain equipment required for Fourth Stage Expansion.

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2 29 The Committee are concerned over the inordinate delays in Construction of Fourth Stage Expansion. Not only there was delay on the part of the State Trading Corporation to issue import licence for steel plates and tubes, but it had also taken the Government more than two years to release foreign exchange of Rs. 25.04 lakhs required for import of instruments, boilers etc. This would not only result in loss of production due to delay in commissioning of the plant but also avoidable drain on foreign exchange for importing the required fertilisers to meet the shortage. It was admitted by the Secretary of the Ministry during evidence that the case could have been handled more expeditiously on the whole and the delay of two years was a matter for serious concern. There

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had also been some 'slippage' in so far as clearance from the indigenous angle was concerned with the result that even though the British credit had been allocated for the import, the actual orders had not been placed. The Committee desire that the matter should be looked into and action taken against the delinquent officials.

5 2.30 It appears that the procedure for release of foreign exchange also requires to be streamlined. The request for foreign exchange should be balanced with the cost of imports needed to make good the loss of indigenous production resulting from non-commissioning of plant for want of some imported equipment. Such cases should therefore get top priority. The possibility of making even free foreign exchange available to the public undertakings for a fixed period should also be considered to avoid such delays.

6 73.5 The Committee are concerned over the loss of production due to power interruptions. The fact that the steps taken during the last one year have resulted in reducing the power interruptions prove that the difficulties in solving this problem are not insurmountable. It however, appears that earlier neither the State Government realised the seriousness of the situation nor was the matter actively pursued with them either by FACT or the Central Government. Had this been done, the Committee see no reason why it should not have been possible to solve this problem of power interruptions.

7 3.9 In the face of the findings of an expert committee (Sharma Committee) which also included an officer of FACT, and which submitted its report when actuals for 11 months for the year 1967-68 were available, the Committee find it difficult to accept the contention of the Management that the loss of production in ammonia plant due to power interruptions was to the extent of 65 days production as against 16 days assessed by the Sharma Committee. The Committee have not been informed of any fresh facts which have come to the notice of the Management on the basis of which it had come to a different conclusion than that reached by the Sharma Committee. As pointed out by the Committee in subsequent paras of this report there were several operational deficiencies like high consumption of raw materials, large down-time of plant and machinery, absence of proper co-ordinated maintenance of all the plants, etc. which affected production in the plant. The Committee,

therefore, desire that instead of explaining away the shortfall in production in reference to power interruptions alone, proper remedial measures should be taken by the Management to improve production and achieve the rated capacity.

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3.13

The Committee are not satisfied with the explanation given for not keeping the emergency oxygen system in working order. They find that the oxygen pump went out of order in early 1966. Considering the large number of power interruptions which greatly affected production, it was expected of the Management to take immediate steps to bring the plant into working order. It, however, appears that steps were taken in this regard only after the Sharma Committee had pointed out the imperative need for it. The failure to keep the oxygen pump working during these years has resulted in considerable loss of production. The Committee trust that steps would now be taken to commission this plant and keep it in working order.

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3.18

It is conceded that the power interruptions cause some damage to the plant. But it is difficult to agree that they caused shut downs to the extent of 19,847 hours in 1967-68. The Committee were assured that the shut downs were not due to defects in design or use of sub-standard material for the plant. In that case the Committee feel that the breakdowns could have been avoided to a large extent by proper maintenance of the plant. As pointed out by the two technical committees, there were deficiencies in the maintenance of the plants. FACT's Auditors have also pointed out that the general maintenance of the machinery had not been up to the mark and that it needed closer attention to avoid frequent break downs. The Committee expect that in future proper attention will be paid by the Management for maintenance of the Plant.

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The Committee trust that with the reorganisation of the maintenance department, greater attention will be paid to maintenance. It needs no emphasis that continuous production depends to a large extent on the attention paid to the maintenance of equipment according to a properly planned and co-ordinated schedule. The Committee expect that this aspect will be given its due weight by the Management in future.

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- 10 3'27 The Committee view with concern the high cost of production at FACT. As pointed out in para above one of the reasons for high cost of production is the heavy incidence of factory overheads and administrative expenses which are much higher than the standard cost fixed by the Management. The Committee feel that there is an imperative need for analysing the reasons for high cost of production and for taking effective steps to bring it down.
- 11 3'28 The Committee also feel that if the standard costs fixed by FACT are to serve any purpose, the reasons for variation between the actual cost of production and the standard cost fixed for each item should be reviewed periodically with a view to locating the causes therefor and to take prompt remedial measures."
- 12 3'33 The Committee feel that it would be useful for a public undertaking to have comparative figures from other undertakings in the same industry about various aspects of their working like consumption of raw materials, cost of production, overhead expenses, marketing expenditure, etc. This would enable them to make a comparative study and to take proper remedial measures in cases where any deficiencies were noticed. As stated by the Secretary of the Ministry during evidence before the Committee, there should be no difficulty in a public undertaking getting such information from another sister concern. If need be, the administrative Ministry concerned, could be approached for this purpose.
- 13 3'34 The Committee also feel that the project units in the administrative Ministries should make comparative studies of important aspects of the working of different units in the public sector in the same industry to locate areas of weaknesses. These could then be brought to the notice of the undertakings concerned for corrective action.
- 14 4'17 The Committee cannot help concluding that the expenditure incurred by FACT on marketing which was over 12 per cent of the sales value was somewhat on the high side.
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- 4.18 The Committee appreciate the work done by FACT in developing an elaborate marketing organisation in South India for the sale of fertilisers. They also realise the need for promotional and publicity work to educate the farmers about the use of fertilisers and their correct application. The Committee, however, feel that the expenditure on marketing organisation has increased at a faster rate than the increase in quantum of sales would justify. There is, therefore, a need for critical study of the marketing organisation and the expenditure incurred on it. The Committee feel that with the increase in volume of production and sales in coming years, the incidence of marketing expenditure per tonne of sales could be brought down if a strict control is maintained over the marketing expenditure.
- 15 4.19 The Committee find that FACT has established its regional offices even at places where there was not much sales activity e.g., in Delhi and Bombay. The Secretary of the Ministry admitted during evidence that Delhi and Bombay were two places where, perhaps, existence of these offices could be objected to and the Ministry had suggested it to the Committee of Directors, appointed by FACT to study the scope for economy in expenditure, to go into the necessity of these two offices being continued.
- The Committee trust that early steps will be taken to bring down the marketing expenses.
- 16 4.32 As a commercial concern FACT has to see that any agreement entered into by it is to its advantage and enforced to safeguard its interests. But in the case of the agreement entered into with Mannam Sugar Mills Cooperative Society, this was not the case. What is difficult to understand is that in spite of repeated comments of the auditors and even after the resolution of the Board of Directors authorising the Managing Director to take appropriate measures to obtain the necessary security from this Society no action was taken to secure the amount outstanding against the Society which amounted to Rs. 6,13,512 as on 31st December, 1968. The Committee are concerned to note that as pointed out by Auditors of FACT the financial position of the Society has gone from bad to worse. As on 30th June, 1967, the total loss carried forward amounted to Rs. 87.50 lakhs thereby completely wiping out the paid up

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share capital of Rs. 40.86 lakhs and leaving no cushion whatsoever for the unsecured creditors. The Committee, therefore, cannot help concluding that in the present case the Management did not act in the best interest of FACT.

The Committee hope that immediate steps would now be taken by the Management to safeguard the amount due from this Society.

- 17 5.5 The Committee find that even if the slow moving spares were excluded, the value of stores and spares was quite high (Rs. 297.08 lakhs) and was equivalent to about 30 months consumption in 1967-68.
- 5.7 The Committee trust that the review of all the stores would be completed expeditiously and action taken to dispose of the surplus items in order to reduce the inventories. They also hope that the system of procurement of stores would be so organised as to ensure that the stores in excess of the laid down reasonable quantities are not accumulated.
- 18 5.9 The Committee find that the average stock of finished goods on 1st January, 1969 was about 2.3 months production. Considering that FACT has a vast marketing organisation and the fertilizers were in short supply and also large quantities of fertilizers had to be imported every year to meet the internal demand the Committee feel that these stocks are high and the reasons for this need to be looked into.
- 19 5.17 The Committee appreciate the difficulties in achieving the designed ratios for the consumption of raw materials because of poor quality of raw materials and power interruptions. But these can hardly justify the excess consumption of hydrogen gas equivalent to 7000 tonnes of ammonia and of ammonia to the extent of 7800 tonnes in converting to the various finished products. Even to a technical committee (Sharma Committee) the loss of ammonia to this extent in 1967-68 was rather 'baffling'. As pointed out in the Report of the Committee of Engineers (P. G. Menon Committee) there were various defects in operation which have contributed to the higher consumption of raw materials. The Committee hope that the recommendations of the two technical committees will be implemented to save FACT from avoidable loss due to very high consumption of raw materials.

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| 20 | 5.19 | <p>The Committee cannot help observing that control over consumption of raw materials left much to be desired. The Management must be receiving reports of daily consumption of raw materials. The Committee cannot understand as to why the Management did not take timely action to reduce the over-consumption of raw materials but had to wait for the Auditors and the Sharma Committee to highlight this fact. They desire that constant watch over the consumption rates of various raw materials should be kept and whenever any major variations are noticed as compared to designed rauos prompt steps should be taken to locate the reasons for higher consumption with a view to taking immediate remedial measures.</p> |
| 21 | 6.6 | <p>The Committee do not consider it conducive to effective management of a large and complex business enterprise like FACT to have such a preponderance of officials on the Board of Directors. Persons on the Board of Directors should mainly be those who have experience of the industry or special knowledge of commercial, financial and administrative matters or of labour management.</p> |
| 22 | 6.7 | <p>The Committee also find that at present only the Managing Director is a full time member of the Board. With the large expansion of FACT they feel that it would be useful to appoint one or two full-time functional Directors. The Committee, therefore, desire that the composition of the Board of Directors might be reviewed to make it more effective and business-like.</p> |
| 23 | 6.11 | <p>The Committee find from the Annual Report of the Coromandel Fertilisers Ltd., that the expenditure incurred by that Company on salaries and wages (including other welfare expenses in 1967-68 was Rs. 97.98 lakhs <i>i.e.</i>, 8 per cent of the value of production in 1967-68 as against Rs. 187.49 lakhs in FACT which works out to about 12 per cent of the total value of production. Thus the expenditure by FACT on salaries and wages was about 1½ times of that in Coromandel Fertilisers Ltd.</p> |
| | 6.12 | <p>It was contended by the Managing Director during evidence that the modern plants like Coromandel Fertilisers Ltd. could not be compared with FACT as these were more 'automatic instrument controlled'.</p> |

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The Committee, however, cannot ignore the fact that in FACT also a major portion of the plant and machinery was erected under the Third Stage Expansion which was commissioned only in 1966. The Committee, therefore, feel that there is scope for economy in expenditure on staff.

6.13

The expenditure in 1967-68 on salaries of staff employed for marketing was 3½ times of that in 1964-65 whereas the increase in sales during the corresponding period was only by 142 per cent. The Committee therefore feel that there is a need for review of the staff strength in the various Divisions of FACT.

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6.16

The Committee realise the difficulties in retrenching the unskilled persons employed by FACT in the past. However, what is surprising is, that there has been a continuous increase in the category of semi- and unskilled workers. Further, in spite of having a large number of semi- and unskilled workers, there were 330 workers employed on daily wages. The number of semi, unskilled and daily workers having thus reached 1719 which was 56 per cent of the persons in all the other categories. The Committee therefore desire that the need for having daily wage workers in addition to a large number of semi- and unskilled workers should be reviewed.

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6.17

The Committee feel that exact measurement and evaluation of the performance of the staff of FACT at all levels by an outside expert body is necessary so that extent of surplus staff is determined. This appraisal will also provide an unbiased yardstick for the management to judge the future performance and maintain control over the operations.

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6.22

In view of the statement made by the Managing Director before the Committee and considering the autonomy granted to the public undertakings in making appointments, the Committee do not consider it necessary to go into individual cases of appointments of persons without advertisement or of retired persons, deputationists, etc. They would, however, stress that the success of any undertaking largely depends on the persons manning it. The persons who have the authority to make appointments should so act as to avoid any criticism on the score of favouritism in making appointments.

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- 27 7·8 The Committee find that one of the reasons which affected the working results of FACT was laxity of control over expenditure.
- 7·9 The Committee do not question the objective of expenditure on such items like travelling, exhibitions/fairs, maintenance of guest house, etc. But they see no justification for large expenditure on these items especially under the present circumstances when the financial results of FACT can hardly be considered satisfactory. It was admitted by the Secretary of the Ministry during evidence that such large expenditure need not have been incurred on travelling and fairs. Evidently there is need for all round economy and greater control over expenditure to improve its working results.
- 28 7·12 The Committee regret to note that the Financial Manager was not consulted as he ought to be before any expenditure was incurred. It is however strange that this fact was not mentioned by the Financial Manager in any of the Quarterly Financial Reviews submitted by him to the Board of Directors/Government during the last three years. He has also not pointed out any case, where in his opinion, there was excessive expenditure and scope for economy. Some such instances pointed out by the Auditors of FACT did not find a place in the Quarterly Financial Reviews. In fact, these Reviews were not as comprehensive as they ought to be. The Committee desire that on the lines of the instructions issued by the C&AG to the Company Auditors, Government should issue suitable instructions to the public undertakings about the main items which should be included in the Quarterly Financial Reviews.
- 29 7·13 The Committee also trust that the Committee of Directors appointed to study the scope for economy in expenditure will examine in detail the expenditure on various items to locate the areas where economies can be effected. It should also review the present procedures and suggest suitable changes for ensuring greater control over expenditure.
- 30 8·10 It is unfortunate that due to some reason or the other there have been delays in the construction schedule of the Cochin Fertiliser Project. The delays in
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construction result in considerable loss of production and increase in capital cost. The Committee therefore desire that every effort should be made to commission the plant as early as possible.

31. 8.11

The Committee have noted with regret the inability of the Government to release free foreign exchange for import of equipment for this project with the result that the equipment had to be purchased from the countries whose Governments had granted credit facilities. This has resulted in extra expenditure of 20 per cent in import of equipment. The Committee are not sure whether non-release of free foreign exchange leads in each case to such excessive increase in the price of imported equipment when it is obtained under credit facilities. The Committee feel highly concerned about this oppressive burden which the public undertakings are called upon to bear due to lack of free foreign exchange. They would suggest Government should make an all out effort to find a solution to this problem.

32. 8.17

The Committee hope that the Government would ensure that engineering capabilities of FEDO and other such organisations are fully utilised by the fertilizer industry, so that there are no avoidable payments in foreign exchange for acquisition of machinery and services available within the country.

33. 8.18

In the course of evidence before the Committee on the 18th February, 1969 the representatives of the Ministry of Petroleum and Chemicals promised to furnish information on certain points. A list of such points was sent to the Ministry on the 27th February, 1969. The Committee regret to note that in spite of reminders sent to the Ministry the required information was not furnished by the Ministry till the adoption of the Report by the Committee on the 11th April, 1969. In the absence of such information it has not been possible for the Committee to comment on certain aspects of the working of FACT. The Committee trust that in future the Government will not allow such a situation to arise.

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PUBLISHED UNDER RULE 382 OF THE RULES OF PROCEDURE AND CONDUCT OF
BUSINESS IN LOK SABHA (FIFTH EDITION) AND PRINTED BY THE GENERAL
MANAGER, GOVERNMENT OF INDIA PRESS, MINTO ROAD, NEW DELHI.
